

*Department of Entomology
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BRITISH MUSEUM (NATURAL HISTORY)

INSECTS OF SAMOA
AND OTHER SAMOAN TERRESTRIAL
ARTHROPODA

PART IV. COLEOPTERA
FASC. 2. Pp. 67-174

HETEROMERA, BOSTRYCHOIDEA, MALACODERMATA AND
BUPRESTIDAE. By K. G. BLAIR, B.Sc.

ELATERIDAE. By R. H. VAN ZWALUWENBERG.

MELASIDAE (EUCNEMIDAE). By E. FLEUTIAUX.

CERAMBYCIDAE. By CHR. AURIVILLIUS.

BRENTHIDAE. By R. KLEINE.

ANTHRIBIDAE. By KARL JORDAN, PH.D.

PROTERHINIDAE. By R. C. L. PERKINS, D.Sc., F.R.S.

WITH THIRTY-NINE TEXT-FIGURES AND ONE PLATE



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INSECTS OF SAMOA AND OTHER SAMOAN TERRESTRIAL ARTHROPODA

Although a monograph, or series of papers, dealing comprehensively with the land arthropod fauna of any group of islands in the South Pacific may be expected to yield valuable results, in connection with distribution, modification due to isolation, and other problems, no such work is at present in existence. In order in some measure to remedy this deficiency, and in view of benefits directly accruing to the National Collections, the Trustees of the British Museum have undertaken the publication of an account of the Insects and other Terrestrial Arthropoda collected in the Samoan Islands, in 1924-1925, by Messrs. P. A. Buxton and G. H. E. Hopkins, during the Expedition of the London School of Hygiene and Tropical Medicine to the South Pacific. Advantage has been taken of the opportunity thus afforded, to make the studies as complete as possible by including in them all Samoan material of the groups concerned in both the British Museum (Natural History) and (by courtesy of the authorities of that institution) the Bishop Museum, Honolulu.

It is not intended that contributors to the text shall be confined to the Museum Staff or to any one nation, but, so far as possible, the assistance of the leading authorities on all groups to be dealt with has been obtained.

The work will be divided into eight "Parts" (see p. 3 of wrapper), which will be subdivided into "Fascicles." Each of the latter, which will appear as ready in any order, will consist of one or more contributions. On the completion of the work it is intended to issue a general survey, summarising the whole and drawing from it such conclusions as may be warranted.

E. E. AUSTEN,
Keeper of Entomology.

BRITISH MUSEUM (NATURAL HISTORY),
CROMWELL ROAD, S.W.7.

Insects of Samoa and other Samoan Terrestrial Arthropoda. Part IV.
Coleoptera, p. 67-174. Heteromera, Bostrychoidea, Malacodermata
and Buprestidae. By K.G. Blair, B.Sc.

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Elateridae. By R.H. van Zwaluwenberg

Melastidae (Eucnemidae), By E. Fleutiaux.

Cerambycidae. By Chr. Aurivillius.

Brentidae. By R. Kleine.

Anthribidae. By Karl Jordan, Ph.D.

Proterhinidae. By R.C.L. Perkins, D.Sc., F.R.S.

With thirty-nine text-figures and one plate. 12s. 1924 M.

Part V: Hymenoptera fasc. 1. p. 1-58. Apoidea, Sphecoidea and Vespoidea.

By R.C.L. Perkins, D.Sc., R.R.S. and L. Levelyn Cheesman, F.E.S., F.Z.S.

Lamidae. By Francis X. Williams

Formicidae. By Dr. P. Santschi. With 33 Text-figures. M.

London, British Museum (Nat-Hist.) 1928. Preis: 5 + 5 Shillings.

Unter den Tenebrioniden aus Samoa sind als vorratsschädigende zu erwähnen: *Gnatoocerus cornutus* F., *Tribolium castaneum* Hbst., *Alpha-tobius diaperinus* Pz und *laevigatus* F.; unter den Lyctidae: *Lyctus brunneus* Steph. und *Minthea rusticollis* Wlk.; unter den Bostrychiden: *Rhizopertha dominica* F., *Xylothrips religiosus* Boil.; unter den Aonidiiden: *Lasioderma serricorne* F.; unter den Cleridae *Necrobia rufipes* de G. Bei *Callirhipis femorata* Rath. fehlt als Zitat: Zacher, (Arbeiten aus der Kais. Biol. Anstalt f. Land- u. Forstwirtschaft, IX, 1913, S. 106-107, Abb. 33.) Ebenso bei *Olethreutes insularis* Fairm, *ibid.* S. 103-105, Abb. 29-31. (Entwicklungsstadien). Von den Cerambyciden sind nach *Akribillius* einige, z.B. *Dihammus acanthias* Pasc. und *rusticator* F., vermutlich erst in neuerer Zeit durch Einschleppung nach Samoa gelangt. Brentiden waren bisher aus Samoa nicht bekannt. *Klethra* beschreibt zwet Arten, *Cyphagogus samoanus* n. sp. und *Chalybodius reverens* n. sp. Die dazu gegenüberliegende tiergeographische Erläuterung wird von Buxton in einer Fussnote

in Apia in lauernden Muskatnüssen auf. Bienen und Wespen sind in Samoa gering an Zahl und zwar sind Bekannt 13 Apiden, 4 Vespiden, 9 Spheciden. Davon sind vielleicht eine ganze Reihe erst in neuerer Zeit eingeschleppt. Nur wenige Formen sind endemisch.

An Ameisen sind 45 Arten von Samoa bekannt, davon 8 kosmopolitisch über die Tropen verbreitet, 26 von anderen pazifischen Inseln, Australien und vom Indo-Malayischen Archipel bekannt und nur 11 lokale Arten. Trotzdem die Zahl der Arten damit wohl kaum erschöpft ist, scheint Samoa doch an autochthonen Arten ärmer zu sein als die Fiji-Inseln.

Die einheimischen Arten werden anscheinend durch die eingeschleppten immer mehr ins Hinterland gedrängt oder vernichtet.

Zacher.

(Berlin - Steglitz).



INSECTS OF SAMOA

PART IV. FASC. 2.

HETEROMERA, BOSTRYCHOIDEA, MALACODERMATA AND BUPRESTIDAE

By K. G. BLAIR, B.Sc.

(With 14 Text-figures.)

FROM the distributional standpoint, the Coleoptera of the groups here dealt with seem to fall into three categories: (a) peculiar to the Samoan Group; (b) of wider distribution in the Pacific, in some cases apparently limited to neighbouring groups of islands, in others extending throughout the tropics of the old world; (c) cosmopolitan, in most cases store-pests and undoubtedly introduced by commerce; this latter category is of course of no value in considering zoogeographical distribution.

Out of about sixty species discussed in the present paper, twenty-two belong to the first category, while five genera, *Apteromerus*, n., *Callistroma* Fairm., *Scolytocis*, n., *Melaneros* Fairm. and *Samoaneros*, n., are also peculiar to Samoa. A further ten species, together with the genus *Menandris* Haag, are known in addition only from the adjacent groups of Wallis Is., Fiji, Tonga, and the Ellice Is. Of these autochthonous genera, *Apteromerus* is no doubt an offshoot from *Bradymerus* Perr., a genus mainly Indo-Malayan and Melanesian in distribution, and *Callistroma* from *Paracupta* Deyr., largely developed in Melanesia. For *Scolytocis* it is difficult to assign any particular origin; *Melaneros* and probably *Samoaneros* are offshoots from the large and somewhat indeterminate genus *Plateros*, and probably also of Indo-Malayan origin.

A consideration of the distribution of some of the more extensive but not too generally distributed genera, *Bradymerus*, *Menimus*, *Uloma*, *Thesilea*,

Chariotheca, *Amarygmus* among the Tenebrionidae, *Pelecotomoides* in the Rhiphilidae, *Callirhipis*, etc., appears to support the inference that the fauna of our region is a development of a branch originating in the Indo-Malay region and running eastward through Melanesia to Polynesia. So far as it is possible to judge from the limited fauna here considered, there seems little evidence of any important contribution having been received from Australia, no genera peculiar to that fauna, or their derivatives, being represented; such features as they have in common, e.g. *Carphurus*, would appear to be due to a common origin in the Papuan region, rather than to an independent origin in Australia.

Collections of greater or less extent from the Samoan Group have been received at the British Museum from the Rev. S. J. Whitmee, 1875, 1876, 1890, and 1897; Dr. H. Swale, 1917, 1918, 1920; Dr. F. W. O'Connor, 1920; while for the purposes of this present work further collections have been kindly lent by the authorities of the Bishop Museum, Honolulu (Coll. Swezey and Wilder, E. H. Bryan, Jr., A. F. Judd), and by Mr. F. Muir of Honolulu (Coll. H. C. Kellers).

For bibliography, the reader is referred to the respective parts of Junk's *Coleopterorum Catalogus* where published, only the original citation, with a reference to a figure, and to papers subsequent to Junk's work being given in the present paper.

The types of new species, except when otherwise stated, are in the British Museum.

The following table shows the distribution, so far as it is known, of the Samoan fauna among the Samoan Is., and in other parts of the Pacific.

The names of species and genera described below as new are shown in heavier type.

	UPOLU.	TUAMOALA.	SAVAII.	MANUA.	FURTHER DISTRIBUTION.
TENEBRIONIDAE					
<i>Mesomorphus villiger</i> Blanch.	×				Melanesia, Hawaii, Indo-Malaya, etc.
<i>Bradymerus granaticollis</i> Fairm.	×				Melanesia.
" <i>amicorum</i> Fairm.	×				Tonga and Fiji.
" <i>lobicollis</i> Geb.	?	×			New Guinea.
<i>Apteromerus convexus</i> Fairm.	×	×			Wallis Is.
<i>Menimus samoensis</i> , n.	·	×			
<i>Tagalus swalei</i> , n.	·	·	?		

	UPOLO	TUTUUA.	SAVAII.	MANUA.	FURTHER DISTRIBUTION.
TENEBRIONIDAE.—continued.					
<i>Gnathocerus cornutus</i> F.	.	?			Cosmopolitan.
<i>Tribolium castaneum</i> Hbst.	.	×	×		”
<i>Palorus austrinus</i> Champ.	.	×			Australia, Damma Is.
“ <i>upoluensis</i> , n.	.	×			
<i>Uloma cavicollis</i> Fairm.	.	×		×	Wallis Is., Ellice Is.
<i>Alphitobius diaperinus</i> Pz.	.	×			Cosmopolitan.
“ <i>laevigatus</i> F.	.	×	×		”
<i>Sciophagus pandanicola</i> Bdwy.	.	×			Melanesia, Polynesia.
<i>Thesilea puncticeps</i> Fairm.	.	×			Fiji (?).
<i>Chariotheca planicollis</i> Fairm.	.	×	×	×	Wallis Is.
“ <i>samoensis</i> , n.	.				
“ <i>sulcipennis</i> , n.	.	×			
<i>Menandris aenea</i> Haag.	.	×	×		Ovalau (Fiji), N. Australia (?).
<i>Amarygmus samoensis</i> Haag.	.	×	×		Vavau (Tonga).
“ <i>tuberculiger</i> Fairm.	.	×	×	×	Fiji, Tonga.
MELANDRYIDAE					
<i>Bryanella samoensis</i> , n.	.			×	
ANTHICIDAE					
<i>Anthicus oceanicus</i> Laf.	.	×			Marquesas Is., Society Is., Hawaii, China, Ceylon, Seychelles, etc.
MORDELLIDAE					
<i>Mordella novemguttata</i> Montr.	.	×			Woodlark Is., Philippines, Borneo, etc.
<i>Mordellistena dodoneae</i> Montr.	.	×		×	New Caledonia, Fiji, Australia.
“ <i>consimilis</i> Blr.	.	×	×		Fiji.
“ <i>samoensis</i> , n.	.	×	×		
“ <i>buxtoni</i> , n.	.	×	×		
“ <i>swezeyi</i> , n.	.	×	×	×	
“ <i>Kellersi</i> , n.	.	×	×		
“ <i>nigrescens</i> , n.	.	×	×	×	
RHIPIPHORIDAE					
<i>Pelecotomoides fulvosericans</i> Fairm.		×	×		Fiji, Tonga, Ellice.
OEDEMERIDAE					
<i>Ananca kanack</i> Fairm.	.	×	×		Melanesia, Polynesia.
“ <i>bicolor</i> Fairm.	.	?	×		Tahiti, Tonga, Ellice, N. Hebrides.
“ <i>decolor</i> Fairm.	.	×	×		Tahiti, Ellice, Marquesas.
<i>Pselaphanca lateritia</i> Fairm.	.	×			Society Is.
<i>Sessinia livida</i> F.	.	×	×		Tahiti, Ellice, Tonga, Fiji.
CHIDAE					
<i>Cis savaiensis</i> , n.	.			×	
“ <i>tutuilensis</i> , n.	.		×		
<i>Scolytocis samoensis</i> , n.	.		×		

	UPOLU.	TUTUILA.	SAVAII.	MANUA.	FURTHER DISTRIBUTION.
LYCTIDAE					
<i>Lycetus brunneus</i> Steph. . .	×	×			Cosmopolitan.
<i>Minthea rugicollis</i> Wlk. . .		×			„
BOSTRYCHIDAE					
<i>Rhizopertha dominica</i> F. . .	×				„
<i>Xylothrips religiosus</i> Bdv. . .		×			Melanesia, Polynesia.
<i>Xylopsocus castanoptera</i> Fairm. .	?				Tropics of Old World.
ANOBIIDAE					
<i>Lasioderma serricorne</i> F. . .		×			Cosmopolitan.
LYCIDAE					
<i>Melaneros atroviolaceus</i> Fairm. .	×		×		
„ <i>quadraticollis</i> Fairm. .	×	×	×		Tonga (?).
<i>Samoaneros acuticollis</i> Fairm. .	×		×		
„ <i>muiri</i> , n. . .		×			
MELYRIDAE					
<i>Carphurus flavipes</i> , n. . .	×				
<i>Carphuroides pectinatus</i> Shp. .	?				Hawaii, Borneo, N. India.
CLERIDAE					
<i>Cylidrus cyaneus</i> F. . .	?		×		Tropics of Old World.
<i>Tarsostenus univittatus</i> Rossi .	×				Cosmopolitan.
<i>Necrobia rufipes</i> De G. . .	×	×	×	×	„
RHIPICERIDAE					
<i>Callirhipis femorata</i> Waterh. .	×	×			Nassau Is.
BUPRESTIDAE					
<i>Callistroma samoensis</i> Sndrs. .	×		×		
<i>Cyphogastra abdominalis</i> Waterh. .	×				D. of York Is., New Britain.
<i>Chrysobothris chrysomela</i> Deyr. .	×				„
<i>Agrius indignus</i> Fairm. . .	×	×			Vavau (Tonga), Polynesia.
„ <i>samoensis</i> , n. . .	×				

The above are represented in the material before me as follows:—

Family : TENEBRIONIDAE.

Gebien, *Coleopt. Catal. Tenebr.* (Junk, parts 15, 22, 28, 37), 1910-11.

The beetles of this family occurring in Melanesia have been well monographed by H. Gebien in "Resultats de l'Expédition Scientifique Néerlandaise à la Nouvelle-Guinée," Vol. xiii., *Zoologie. Livr. 3*, 1920 (subsequently referred to as *Tenebr. N. Guin.*). In this work a full synonymy is given, in addition to

a complete account of the distribution of each species as known to the author ; many records from Samoa are included.

The same author had previously published two lists of Tenebrionidae from Samoa, viz. :

1. *Denkschr. K. Akad. Wiss. Wien*, Bd. 89, p. 689, 1914 (*Bot. u. Zool. Ergebn. Forschungsreise nach Samoa*, 1905). Coll. by Dr. Rechinger.
2. *Arch. Naturg.*, Bd. 88, A. 10, p. 153, 1922. Coll. Dr. K. Friederichs.

1. *Mesomorphus villiger* Blanchard.

Blanchard, *Voy. Pôle Sud*, iv, p. 154, pl. 10, fig. 15, 1853 ; Gebien, *Teneb. N. Guin.*, p. 229.

Upolu : Apia, 23.i.1927, iii., iv., 23.v., and xii.1924.

Previously received from Rev. S. J. Whitmee, 1876 ; and already twice recorded from Samoa by Herr Gebien.

This species, of which the type was originally obtained in New Guinea, is widely distributed in the Melanesian groups, its range also extending to Australia, the Hawaiian Is., through China to Japan, the Indo-Malay region, Madagascar and tropical Africa. I have not seen examples from Tahiti or other of the Polynesian groups.

The species probably occurs throughout the year, as in New Guinea (Gebien).

2. *Bradymerus granaticollis* Fairmaire.

Ann. Soc. Ent. Belg., xxvii (ii), p. 23, 1883 ; Gebien, *Teneb. N. Guin.*, p. 248.

Upolu : Apia, 24.iv., v., vii., x., xii.1924 ; Malololelei, iv.1924 ; Samoa, 1920 (O'Connor), and vi.-ix.1916 (Swale).

Described from a specimen from Duke of York Is., it occurs in New Ireland, New Britain, Solomon Is., New Guinea, Dorey, and the Moluccas.

3. *Bradymerus amicorum* Fairmaire.

Rev. Zool. (2), I, p. 420, 1849 (*Bolitophagus*) ; Blanchard, *Voy. Pôle Sud*, iv, p. 166, pl. 11, fig. 2, 1853.

Upolu : Apia, 24.iv. ; Malololelei, iv.1924.

Tonga ; Vavau, Neiafu, 1.iii. 1925 ; specimens also in British Museum from the Fiji Is. and Tongatabu (type locality).

Closely allied to the preceding, which it appears to replace in the Fiji Is.

4. *Bradymerus lobicollis* Gebien.

Teneb. N. Guin., p. 240, figs. 14 and 15.

Tutuila : Fagasa, 9.ix.1923 (Swezey and Wilder).

Samoa (Whitmee, 1875).

The unique type was obtained in New Guinea. The two specimens before me appear to differ from Gebien's figures in their narrower form, having the elytra fully half as long again as their united width, and in the thorax being slightly narrower towards the base ; but in the numerous other peculiarities of the species they agree well with the description.

Apteromerus, gen. nov. (BOLITOPHAGINAE).

As *Bradymerus* Perr. (redefined Gebien, *Philipp. Jnl. Sci.*, p. 536, 1925), but apterous. Canthus rounded, scarcely as wide as the eyes, antennae with 5-jointed club (the 7th joint narrower than the following joints) ; thorax slightly narrower than elytra, a little narrower at apex than at base, sides feebly rounded, not crenulate ; elytra at base slightly wider than base of thorax, widest behind the middle, humerus subrectangular but without callus, intervals carinate ; metasternum short ; tibiae rounded externally.

5. *Apteromerus convexus* Fairmaire (Text-fig. 1).

Rev. Zool. (2), I, p. 417, 1849 (*Opatrinus*).

Upolu : Aleipata, iv. and xi.1924, 8 examples.

Tutuila : Amauli, 6.ix.1923, 12 examples ; Leone Road, 7.ix.1923, 1 example ; Fagasa, 8.ix.1923, 3 examples ; Pago Pago, 27.ix.1923, 1 example (Swezey and Wilder), and 2 examples (Kellers).

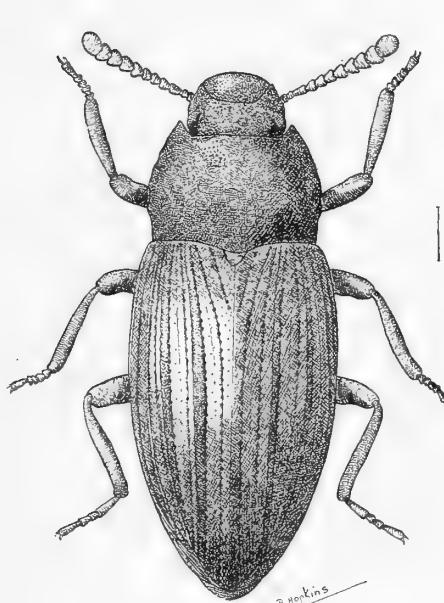
Wallis Is. (Type of Fairmaire).

Placed with some doubt by its author in the genus *Opatrinus*, the species is omitted from Gebien's Catalogue. The series before me agrees well with the description ; it need only be added that the present species is apterous, or at least has very poorly developed wings, with the usual concurrent features of a short metasternum and lack of humeral callosity.

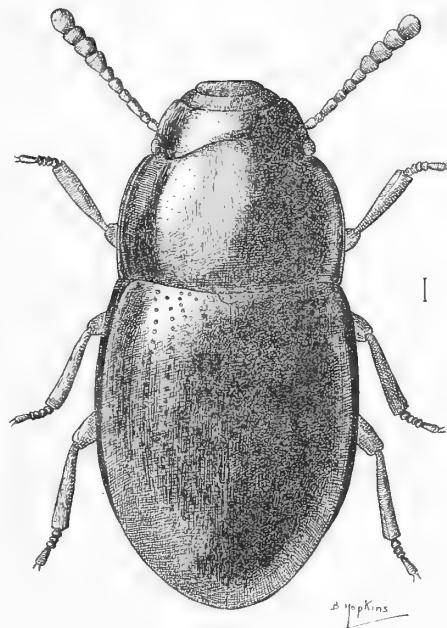
6. *Menimus samoensis*, sp. n. (Text-fig. 2).

Nitid, blackish piceous, with legs and antennae reddish. Head large, frons nitid, finely and sparsely punctate, clypeus more opaque, widely emar-

ginate in front, the clypeal suture straight in the middle. Eyes very small, scarcely visible from above. Antennae moderately slender, reaching a little beyond the base of the thorax, 3rd joint elongate, 4th to 6th joints decreasing a little in length, but even in ♀ not transverse, the last four forming a loose



TEXT-FIG. 1.—*Apteromerus convexus* Fairmaire.



TEXT-FIG. 2.—*Menimus samoensis*, sp. n.

club, with 8th and 9th slightly transverse in ♀, elongate in ♂. Thorax feebly and sparsely punctate, the base bordered throughout, with an impressed line of closely placed but ill defined punctures within the border; lateral margins narrow in front, becoming wider behind. Elytra suboval, the striae slightly impressed and closely, and rather coarsely punctate, striae and punctures becoming obsolete behind; intervals with a single row of widely spaced punctures. Prosternum depressed behind coxae, but its apex again sharply raised.

Length: 3 mm.

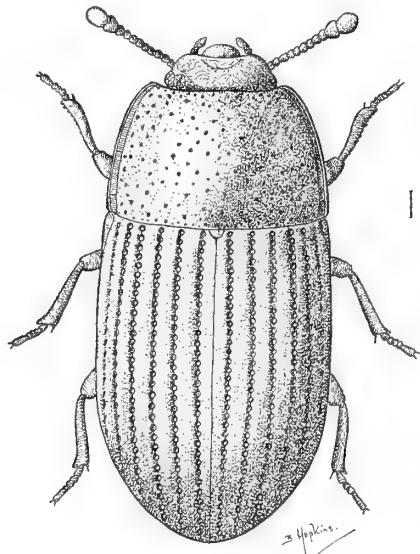
Upolu: Malololelei, 2000 ft., 4 examples.

(Paratype in Bishop Museum, Honolulu.)

Allied to *M. blairi* Gebien (*Phil. Journ. Sci.*, p. 111, 1925), but much darker, with more slender antennae, and elytral striae more closely punctate.

7. *Tagalus swalei*, sp. n. (Text-fig. 3).

Elongate oval, flavous, under side and limbs brownish. Head strongly transverse, sunk to the eyes in the prothorax, widely rounded before the eyes,



TEXT-FIG. 3.—*Tagalus swalei*, sp. n.

depressions almost as though a little shrivelled in drying. Scutellum small. Elytra short, very convex at sides and behind, so as to overhang the lateral margins; striae deep, rather strongly punctate, nearly as wide as intervals, becoming obsolescent near apex; no scutellar stria present; intervals convex and even, except 9th which is strongly expanded above the metasternum owing to the sinuosity of the lateral margin. Tibiae carinate externally, finely denticulate and expanded towards apex to form a sharp apical tooth.

Long: 3 mm.

Samoa (Dr. H. Swale). Two specimens without further data.

It is possible that a new genus may be required for this insect, which differs from *Tagalus cavifrons* Fairm. (the only species of *Tagalus* known to me) in its less parallel form, with the thorax scarcely margined at the base and not impressed in front.

8. *Gnathocerus cornutus* Fabricius.

Ent. Syst. Suppl., p. 51, 1798.

A cosmopolitan species occurring in meal and flour, and recorded from Samoa by Herr Gebien, from the collection of Dr. K. Friederichs, but not contained in any of the collections now before me.

9. *Tribolium castaneum* Herbst.

Käf., vii, p. 282, pl. 112, fig. 13, 1797 ; Blair, *Ent. Mo. Mag.* (2), xxiv, p. 222, 1913.

T. ferrugineum Geb. (*Col. Cat. Tenebr.*), nec F.

Upolu : Apia, 22.iv.1924 (in oats), 20.vi.1924, i. and ii.1925.

Tutuila : Pago Pago, 0-300 ft., iv.1918 (Kellers).

Cosmopolitan, occurring everywhere in grain and other dried products, foodstuffs, insect collections, etc.

10. *Palorus austrinus* Champion.

Ent. Mo. Mag. (2), vii, p. 30, 1896 ; Gebien, *Teneb. N. Guin.*, p. 280.

Upolu : Apia, ii.1925. A single specimen.

Champion's series came from N.-W. Australia and Damma Is., while the British Museum possesses specimens from Queensland and N. S. Wales.

11. *Palorus upoluensis*, sp. n.

Castaneous, antennary orbits strongly raised, rounded and densely punctate, the clypeus between them flat and sparsely punctate, nearly as long as the antennary orbit. Antennae extending nearly to middle of thorax, the last five joints a little wider than the preceding ones, forming an elongate indistinct club. Eyes prominent, coarsely faceted, their anterior margin not concealed by the antennary orbits. Thorax transverse, widest at the base, thence very slightly narrowed until more strongly rounded to the anterior angles ; disc rather strongly and moderately closely punctate, with a small indistinct area on each side free from punctures. Elytra elongate ovate, widest at about anterior quarter, sides feebly rounded. Striae scarcely impressed, rather

strongly punctate, punctures larger and more widely spaced in front; intervals almost flat, each finely and irregularly punctured in about two indefinite series.

Long. 2·5 mm. ; lat. < 1 mm.

Upolu: Apia, xi.1924, 1 example; Malololelei, iv.1924, 2 examples.

(Paratype in Bishop Museum, Honolulu.)

Possibly the insect recorded by Gebien as *Palorus*, sp. from Dr. Friederich's collection.

In its broad form and non-parallel elytra this insect more closely approaches the Australian *P. pygmaeus* Cart. than any other species known to me, but is smaller, with longer antennae and relatively broader clypeus. *P. austrinus* is relatively much longer, more than three times as long as wide, with the elytral intervals fairly regularly uniseriate-punctate. The specimen from Apia (type) is a little larger than those from Malololelei, and more darkly coloured, the latter having the elytra near the tip and towards the shoulders indistinctly paler.

12. *Uloma cavicollis* Fairmaire.

Rev. Zool. (2), I, p. 447, 1849.

♀ *U. encausta* Fairmaire, *loc. cit.*

Upolu: Apia, ii., iii., 25.iv., 3.vii., x.1924; also 13.ix.1923 (1 ♀ Swezey and Wilder).

Samoa (Swale and O'Connor).

Niue, 6.viii.1918 (H. C. Kellers).

Swain's Is. (J. J. Lister).

Wallis Is. (Types of Fairmaire).

Ellice Is., 1920 (O'Connor).

The locality "Sandw. Is." on a male in the Fry Collection is no doubt a misreading for "Samoa Is."

Fairmaire's type of *U. cavicollis* from the Doué Collection is now in the British Museum, and agrees exactly with a rather poorly developed ♂ from Samoa. The specimens forming the short series from the Ellice Is. differ from Samoan examples in having a much smaller excavation on the thorax of the ♂, with the prominences very poorly developed; also in the thorax being completely immarginate at the base. In *U. cavicollis* there is a fine but more or less entire margin. The Ellice Is. form agrees with the typical one in having

the median lobe of the mentum V-shaped, or with a deep median triangular impression, in both sexes. In Gebien's *Col. Cat. Tenebr.*, p. 404, the patria of *U. cavigollis* is given as "Viti-Inseln," but I have not seen any example from the Fiji group where it appears to be replaced by *U. insularis* Guér. (= *multicornis* Fairm.).

13. *Alphitobius diaperinus* Panzer.

Faun. Germ., 37, p. 16, 1797; Gebien, *Tenebr. N. Guin.*, p. 277.

Upolu: Apia, i., x.1924.

A cosmopolitan species, but apparently not hitherto recorded from Samoa; the British Museum possesses specimens from New Caledonia, the Gilbert Is., and Hawaii (Blackburn).

14. *Alphitobius laevigatus* Fabricius.

Spec. Ins., i, p. 90, 1781; Blair, *Ann. Mag. Nat. Hist.* (8), xiii, p. 486, 1914; Gebien, *Tenebr. N. Guin.*, p. 277.

A. piceus Olivier, *Encycl. Méth.*, vii, p. 50, 1792, *et auctt.*

Upolu: Apia, in almost every month of the year.

Tutuila: Pago Pago, iv.1918 (Kellers).

Cosmopolitan, already twice recorded from Samoa by Herr Gebien (Coll. Rechinger and Friederichs), and received by the Museum from Dr. Swale. Also recently found under the bark of a tree in the Marquesas Is. (C. L. Collenette). Comes readily to light at night.

15. *Sciophagus pandanicola* Boisduval.

Voy. Astrol. Ent., p. 258, 1835.

Pachycerus domesticus Montrouzier (Geb. *Col. Cat. Tenebr.*).

Chariotheca infima Fairmaire, *Ann. Soc. Ent. France* (6), i, p. 279, 1881.

Upolu: Malololelei, 2000 ft. 25.iv., 14-30.vi.1924, 3 examples.

A species widely distributed among the Pacific Is., and already twice recorded by Gebien from Samoa, whence it was received by the Museum from Dr. Swale. The British Museum possesses specimens from Fiji, New Caledonia, Damma Is., and Hawaii; and the species was recently found in numbers by members of the St. George Expedition, in the Marquesas Is., "under bark of tree" (C. L. Collenette), and on Raiatea, Society Is. (Miss E. L. Cheesman). On a specimen in the British Museum from Fiji (W. Greenwood), found in

pulverised dry grass in a cave, is the interesting note "emits a steady greenish light." It is to be hoped that the living insects will be carefully observed in order to determine whether this luminosity is a normal function of the beetle, or another case of an insect having become either infected with luminous bacteria, and moribund, or smeared with some putrescent substance containing luminous bacteria. No case of true light emission is hitherto known in this family of beetles.

16. *Thesilea puncticeps* Fairmaire.

Ann. Soc. Ent. France (6), I, p. 281, 1881.

Upolu: Apia, x.1924, 26.v.1924 (Bryan); v.-ix.1916 (Swale); Tuaefu, 16.ix.1923 (Swezey and Wilder).

Savaii: 1000 ft., 21.xi.1925.

Agrees well with the description: Fairmaire expresses doubt as to the type locality, giving Fiji or some neighbouring island. A single specimen only from each of the above localities; two of them are considerably smaller than the rest, 5.5 mm. instead of 7 or 8 mm., but do not appear to differ specifically.

It may be noted that *T. ruficornis* Bates, *T. politula* Fauv., and *T. mirabilis* Fauv. (*Geb. Col. Cat. Tenebr.*, p. 502 *), should all be transferred to *Callismilax*. Of the remaining New Caledonian species, *T. baladica* Montr. would appear to be a true *Thesilea*; *T. fawveli* Geb. (*versicolor* Fauv.), *T. kanalensis* Fauv., and *T. purpurea* Fauv. are unknown to me.

17. *Chariotheca planicollis* Fairmaire.

Rev. Zool. (2), I, p. 451, 1849 (*Olisthaena*).

Thesilea planicollis Fairm., *Geb. Col. Cat. Tenebr.*, p. 502.

Upolu: Apia, x.1924, i.-v.1925; Malololelei, 2000 ft., 28.xi.1924.

Savaii: Safune, rain forest, 2000-4000 ft., 8.v.1924 (Bryan).

Tutuila: Amauli, 5.ix.1923; Fagasa, 7.ix.1923 (Swezey and Wilder); Pago Pago, iv.1918 (Kellers).

Already recorded by Gebien from Samoa (coll. Dr. Friederichs), as *C. cupripennis* Pasc. var. In *Tenebr. N. Guin.*, p. 353, the same author quotes

* The references to Fauvel's paper are erroneously given as *Rev. d'Ent.*, xxiii, 1904, instead of xxiv, 1905.

this latter species in synonymy, considering that we have but one variable and widely distributed species. Judging from the material before me, the Samoan race (type from Wallis Is.) appears to differ constantly from the New Guinea race (*cupripennis*) in its smaller size, less shining, more finely punctate, and straighter-sided thorax (the sides converging slightly from the base), and in the different colour pattern on the elytra, which present the suture aeneous or bronze, ranging outwardly through purple, blue, green, aeneous to coppery (on 4th interval), beyond which they are dark and scarcely metallic. *C. cupripennis*, though very variable in hue, does not present this sequence of colours.

I have not seen an authentic specimen of *C. planicollis*, and Fairmaire's description is not sufficiently detailed to enable me to be sure of the accuracy of the above determination.

18. *Chariotheca samoensis*, sp. n.

Black, moderately nitid, elytra metallic, varied aeneous and cupreous, with the 5th, 6th, and 7th interstices raised externally, almost overhanging the exterior stria, and 3rd, 5th, and 7th intervals strongly cariniform towards apex.

Head closely, almost rugosely punctate; antennae reddish, barely reaching middle of thorax, last five joints forming an elongate club. Thorax widest at the base, thence gradually, arcuately narrowed in front; anterior angles acute, strongly produced, base finely margined at sides; disc rather coarsely but irregularly punctate, much less densely than the head. Elytra strongly punctate striate, individual punctures elongate, striae deeply impressed towards apex, intervals feebly convex except as above. Thoracic epipleura very strongly punctate, prosternum not impressed. Abdomen with the first three segments moderately sparsely and, except in front, finely, the last two densely and finely punctate. Tarsi normal. No apparent sexual differences in the three specimens before me.

Long. 10 mm.

Savaii: Safune, lower forest, 1000–2000 ft., 10.v.1924 (Bryan).
(Paratypes in Bishop Museum, Honolulu.)

According to the key given by Gebien (*Tenebr. N. Guin.*, p. 383), this species would appear to be *C. alternicostis* Geb., but the latter has a differently shaped thorax, narrowed towards the base as well as the apex, with crenulate sides, and differently coloured elytra.

19. *Chariotheca sulcipennis*, sp. n. (Text-fig. 4).

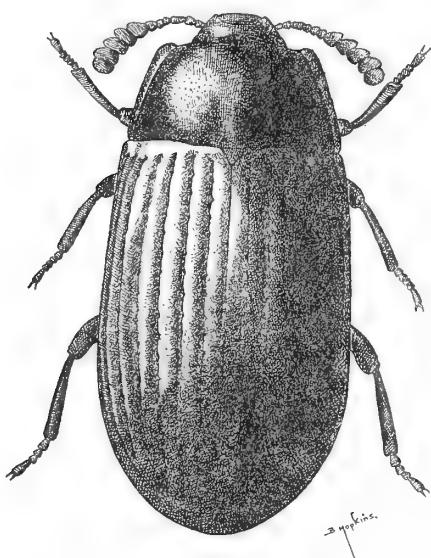
Short, convex, upper side viridiaeneous or cupreous, under side and legs black.

Head slightly convex between the eyes, strongly and moderately densely punctate, clypeal suture distinct but not impressed nor interrupting the margin of the head, eyes with narrow marginal sulcus; labrum prominent; antennae not reaching base of thorax, last six joints produced on inner side, forming a

loose club. Thorax about twice as wide at base as its median length, sides somewhat arcuately narrowed forwards, with a strongly incrassate border; anterior angles blunt, scarcely prominent, anterior margin feebly arcuate, finely bordered at sides; base not bordered, rather broadly prominent in middle; disc strongly convex from side to side, more finely and sparsely punctate than the head. Scutellum rather large, almost an equilateral triangle, finely punctate. Elytra widest behind the middle, the striae deeply impressed throughout, rather distantly punctate, with intervals strongly convex, very finely and not closely punctulate; scutellary stria scarcely indicated, the others ending sharply and separately at a little distance from the base; posteriorly,

TEXT-FIG. 4.—*Chariotheca sulcipennis*,
sp. n.

the first nearly meets the 9th (marginal) at the apex, the 2nd nearly meets the 7th, which here approaches the 9th, the 8th being abbreviated above the third abdominal segment, the 3rd and 6th unite at the apex, while the 4th and 5th may or may not unite, either with one another, or with the next outside them; the lateral margin rather broad and prominent, but concealed posteriorly from above by the convexity of the elytra; epipleura impunctate, concave beneath the shoulder, thence flat and gradually narrowed, becoming obsolete about the base of the last ventral segment. Under side nitid, black, for the most part almost impunctate; mentum with strong median carina; prosternum obtusely carinate in front, the process with an impressed border, propleurae impunctate;



mesosternum deeply excavate; metasternum almost impunctate, except for a border of large punctures behind the intermediate coxae, with a deep, rather sinuate, transverse sulcus on each side in front of the posterior coxae. Abdomen very finely and sparsely punctulate, the anterior border of each of the first four segments with a row of large punctures or foveae, those on the first segment continued as a border to the intercoxal process, those on the fourth segment smaller and more widely spaced than those on the others. Legs nitid, finely punctulate; first joint of posterior tarsi as long as the two following together, the claw joint longer than the rest together.

Sexual characters not evident.

Long. 5 mm.; lat. 2.5 mm.

Upolu: Apia, xi.1924, 1 example (Type).

Savaii: Safune, 10.v.1924, 1 example (Bryan).

(Paratype in Bishop Museum, Honolulu.)

Owing to its short broad form, the species described above recalls a *Platydema* rather than a *Chariotheca*. The two specimens before me differ in colour, that from Upolu having the elytra viridiaeneous, while in the example from Savaii they are cupreoviolaceous; probably in a longer series the colour would be found to vary indefinitely.

20. *Menandris aenea* Haag.

Journ. Mus. Godeffr., v, p. 131, pl. 7, fig. 20, 1879.

Upolu: Malololelei, 2000 ft., 14–30.vi.1924.

Tutuila: Pago Pago, 9.ix.1923 (Swezey and Wilder).

Originally described from a specimen from Upolu, and since recorded by Herr Gebien (Coll. Rechinger) from Ovalau, Fiji.

The two specimens before me differ rather considerably, that from Tutuila agreeing with a cotype from the *Mus. Godeffr.* better than that from Upolu. The latter, a ♀, is larger and stouter, with the head and thorax brown, scarcely aeneous, and finely and rather obscurely punctate; the front of the head is not at all flattened. In the Tutuila specimen, a ♂, the head over a large triangular area is distinctly flattened, and rather coarsely and closely punctured. It is quite possible that these differences are sexual.

In the Bates Collection in the British Museum, there are two specimens labelled "North Australia, Dämel." One of these bears the label "*Menandris*

aenea m.," I believe in Haag Ruthenberg's handwriting, and the No. 1927. Both are ♂, and are undoubtedly conspecific with the cotype from Samoa, which also bears the number 1927.

21. *Amarygmus (Platolenes) samoensis* Haag.

Journ. Mus. Godeffr., v, p. 133, pl. 7, fig. 23, 1879 ; Gebien, *Tenebr. N. Guin.*, p. 405.

Upolu : Apia, Malololelei, Vailima ; in almost every month of the year.

Savaii : Tuasivi ; Safune, lower forest, 1000-2000 ft.

Tutuila : Pago Pago ; Leone Road.

Recorded or received in almost all collections from Samoa.

Probably, as suggested by Haag, *A. samoensis* is no more than a race of the more widely distributed Pacific species, *A. hydrophiloides* Fairm. In some fifty specimens from Samoa now before me, the colour is generally aeneous, while the elytra are frequently and the thorax is much more rarely violaceous. Two examples of the same form are labelled Tonga : Vavau (Buxton and Hopkins), and two more in the British Museum (probably erroneously) "Sandw. Is." (Fry Coll.).* Typical *A. hydrophiloides*, described from specimens from Wallis Is. and Tonga Tabu, are bright blue or greenish blue, and this form is widely distributed from New Guinea to Fiji. Both forms have the anterior and intermediate tarsi expanded in the ♂ (*Platolenes* Geb., *Tenebr. N. Guin.*), and in both, in the same sex, the posterior tibiae are thickened about the middle.

21A. *A. hydrophiloides* Fairmaire.

Rev. Zool. (2), I, p. 450, 1849.

A specimen of the typical form was obtained at Haloga, Vavau, 4.iii.1925, with one of the *samoensis* form, and another at Funafuti, Ellice Group, 17.ix.1924.

22. *Amarygmus tuberculiger* Fairmaire.

(*Loc. cit.*)

Upolu : Malololelei, iv., vi.1924, 3 examples ; Vailima, vi.1924, 1 example ; Tafua volcano (Swale).

Savaii : Safune, lower forest, 1000-2000 ft., 9.v.1924, 2 examples (Bryan).

* See *Uloma cavicollis* (*ante*, p. 76).

Tutuila : Leone Road, 7.ix.1923, 1 example (Swezey and Wilder).

Rather larger than the foregoing species, and of a blackish green or blue, the elytral intervals with a fairly regular median row of fine tubercles or granules ; the eyes more approximate in front, being separated by a distance about equal to the middle thickness of the third antennal joint (in *A. hydrophiloides* the distance is about twice as great), and the anterior and intermediate tarsi not thickened in the ♂. The British Museum series has nearly all been received at different times from Fiji.

Family : MELANDRYIDAE.

Csiki, *Col. Cat. Serropalpidae* (Junk, pars 77), 1924.

Seidlitz, *Naturgesch. Insect. Deutschl.*, Abt. i, Bd. v, 2. Hälften, p. 507, 1898.

Bryanella, gen. n.

Elongate, narrow, feebly arcuate along dorsal surface, head vertical, scarcely visible from above ; eyes large, deeply emarginate for antennal insertions ; maxillary palpi large, last joint elongate, cultriform, longer than the rest together, the two penultimate joints about equal, almost equilaterally triangular, slightly wider than the terminal joint ; antennae long, extending to penultimate ventral segment, 2nd joint very short, remaining joints elongate, subequal. Thorax about as long as wide, arcuate in front, bisinuate behind, the sides subparallel for the greater part of their length, arcuately narrowed in front, lateral carina present only on basal half ; prosternum separated by a distinct suture from the pleurae ; anterior coxae contiguous behind, their cavities widely open ; scutellum transverse, truncate behind ; elytra, except for a well-marked sutural stria, non-striate, densely and evenly punctate. Abdomen marginate at sides, the first segment much longer at the sides than behind the widest part of the coxae, at its shortest but little longer than the second segment, 3rd, 4th, and 5th segments successively a little longer, their anterior and posterior margins arcuate, subparallel ; terminal segment triangular, shorter than the preceding. Anterior tibiae stout, not much longer than the first tarsal joint, penultimate joint broad and bilobed ; intermediate and posterior tibiae slender, with 6 or 7 oblique but unequal ridges on the outer side of each, tibial spurs unequal, serrulate on each side beneath, the longer

about one-third as long as the first tarsal joint ; penultimate joint of posterior tarsi simple.

Genotype : *Bryanella samoensis*, sp. n.

But for the distinct prosternal sutures, this genus, in the key to the genera of the subfamily Dircaeinae given by Seidlitz (*supra*), would appear to resemble the Australian genus *Talayra*, Champion, from which, however, it further differs in the form of the palpi, in the proportionate lengths of the abdominal segments, and in the shorter and more unequal posterior tibial spurs. From *Dircea*, *Phloeotrya*, etc., with prosternal sutures distinct, it is separated by the slender antennae, serrulate tibial spurs and simple penultimate joint of the posterior tarsi.

23. *Bryanella samoensis*, sp. n.

Dark castaneous-brown, with iridescent reflections ; thorax darker, almost black ; legs, antennae and palpi paler.

Thorax coarsely and densely punctate, the punctures obliquely impressed, each with a tubercle near its anterior margin bearing a long backward-sloping seta. Elytra with a strong sutural stria on each, puncturation similar to that of thorax, but notably finer. Prosternum separated from the pleurae by a distinct curved suture, and more coarsely and less densely punctate ; metasternum finely strigulate in middle, coarsely punctate at sides, metapleurae very densely and finely punctate ; posterior coxae and first abdominal segment rather coarsely punctate at sides, the following abdominal segments successively more finely punctate. Posterior tibial spurs somewhat unequal, the longer about one-third as long as the first tarsal joint. Anterior femora feebly arcuate, with rather long, dense, yellowish pubescence beneath (? ♂).

Length : 3 mm.

Savaii : Safune, lowlands to 1000 ft., 1.v.1924 (Bryan). Type in Bishop Museum, Honolulu.

The unique individual described above does not seem to fit into any recognised genus of the family. Superficially it resembles a very small specimen of *Talayra elongata* Macl., but, in addition to the marked generic characters noted, it differs entirely in sculpture, which has no suggestion of transverse lines as in that species.

Family : ANTHICIDAE.

Pic, *Col. Cat.* (Junk; pars 36), 1911.

24. *Anthicus oceanicus* Laferté.

Monogr. Anthic., p. 170, 1848.

Upolu : Apia, 19.ix.1923, 1 example (Swezey and Wilder).

With type locality Marquesas Is., the species has a wide oceanic distribution, being represented in the Museum Collection by specimens from Hawaii, Society Is., Cocos Keeling Is., China, Ceylon, and the Seychelle Is.

Family : MORDELLIDAE.

Csiki, *Col. Cat.* (Junk, pars 63), 1915.

25. *Mordella novemguttata* Montrouzier.

Ann. Soc. Agric. Lyon, vii, p. 33, 1855.

Upolu : Apia, 31.i.1925, 1 example.

Represented in the British Museum by specimens from Borneo, the Philippine Is., etc.

The single specimen before me differs a little from the typical forms (taken on Woodlark Is.) in having the anal style black, with the base covered with white pubescence, and the last two ventral segments clothed at the base only with similar pubescence. The type is described as having the anal style fulvous, and examples from Borneo and Singapore agreeing in this respect have the last two ventral segments entirely clothed with fulvous pubescence. The present form with black cauda is represented in the British Museum by examples from N. Luzon, Sibuyan, and Sumba Is.

Mordellistena Costa.

The Samoan representatives of this widely spread genus, which includes a considerable number of species, may, so far as regards the material before me, be separated as follows :

1. (10) Unicolorous.
2. (9) Castaneous brown, size larger.
3. (6) Eyes narrow; 4th joint of antennae similar to 5th; comb formula 5 : 4.2.2.

4. (5) Eyes hairy, base not much shorter than lateral edge ; cauda slender.
Length : $3\frac{1}{2}$ mm. *dodoneae* Montr.

5. (4) Eyes almost naked, base only half as long as outer edge ; cauda stouter. Length : $4\frac{1}{2}$ mm. *samoensis*, sp. n.

6. (3) Eyes larger ; 4th joint of antenna short, only $\frac{1}{2}$ as long as 5th.

7. (8) Posterior tibiae with 4 combs, *i.e.* 3 strong combs, with sometimes a weak 4th, above the short subapical comb. Length : about $3\frac{1}{4}$ mm. *consimilis* Blair.

8. (7) Posterior tibiae with 3 combs, *i.e.* 2 long combs, with indications of a third, above short subapical comb. Length : about 3 mm. *buxtoni*, sp. n.

9. (2) Blackish. Length : $2\frac{1}{2}$ mm. *nigrescens*, sp. n.

10. (1) Not unicolorous.

11. (12) Elytra dark, with median longitudinal pale streak in basal half. *swezeyi*, sp. n.

12. (11) Pale basal streak of elytra embraces shoulder ; a transverse band of pale pubescence behind middle *kellersi*, sp. n.

26. *Mordellistena dodoneae* Montrouzier.

Ann. Soc. Ent. France (3), viii, p. 306, 1860 ; Blair, *Ann. and Mag. Nat. Hist.* (9), ix, p. 567, 1922.
Mordella dodoneae Cziki, *Col. Cat. Mordell*, p. 12.

Upolu : Apia, xii.1924 ; Aleipata, iv.1924, 1 example each locality ; Leulumoega, 14.ix.1923, 5 examples (Swezey and Wilder).

Savaii : Fagamalo, xi.1925, 1 example.

Manua : Tau, 27.ix.1923, 1 ex. (Swezey and Wilder).

Type locality, New Caledonia ; also recorded from the Fiji Is. and Australia.

27. *Mordellistena consimilis* Blair (Text-fig. 5).

Ann. and Mag. Nat. Hist. (9), ix, p. 568, 1922.

Upolu : Apia, x. and xii.1924 ; Aleipata, iv.1924 ; Malololelei, vi.1924 ; Leulumoega, 14.ix.1923 (Swezey and Wilder).

Tutuila : iv., 21.vi., 21.vii.1918 (Kellers) ; Pago Pago, 9.ix.1923, 5 examples ; Fagasa, 9.ix.1923 ; Afono Trail, 25.ix.1923, 1 example each locality (Swezey and Wilder).

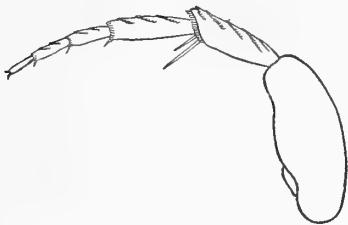
Type locality, Fiji Is.

Very similar to *M. dodoneae* Montr., but the 4th joint of the antennae is much shorter than the 5th, instead of being of equal length, the eyes are larger and more approximate, the distance between them in the ♂ being rather less than that between the antennal bases, and the tibial combs are different (Text-fig. 5).

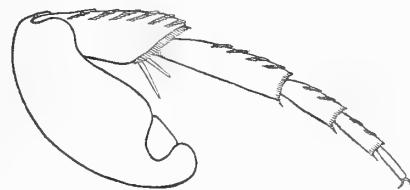
28. *Mordellistena samoensis*, sp. n. (Text-fig. 6).

Castaneous, covered with a moderately dense and long rust coloured pubescence. Eyes almost glabrous, long and narrow, the base less than half as long as the lateral margin, and their distance apart about three times the greatest width of one of them. Antennae moderately long, reaching a little beyond the apices of the posterior coxal processes, joints 1 to 3 shorter than the rest, 4 to 10 subequal, somewhat flattened, each about twice as long as its greatest width. Cauda rather stout, a little shorter than posterior tarsus, acute at apex. Posterior tibia stout, its apex rather more than one-third as long as the posterior edge, the latter with 5 or 6 oblique combs subequal in length, not reaching half way across the outer face; the internal spur more than half as long as the first tarsal joint, the external about half as long as the internal (Text-fig. 6); tarsal combs 4.2.2. Long. (cauda excluded) 5 mm.

The sexes differ but slightly, antennae of ♂ a little longer than those of ♀.



TEXT-FIG. 5.—*Mordellistena consimilis*,
Blair; posterior leg.



TEXT-FIG. 6.—*Mordellistena samoensis*,
sp. n.; posterior leg.

Upolu: Apia, xii.1924, 1 example; Vailima, i., iv.1925, 3 examples; Malololelei, xi.1924, 1 example.

Tutuila: Fagasa, 9.ix.1923, 1 example (Swezey and Wilder); and 2 examples (Kellers).

(Paratypes in Bishop Museum, Honolulu, and in Coll. F. Muir.)

Very like New Caledonian specimens of what I take to be *M. dodoneae* Montrouz., but a little larger and darker in colour, pubescence longer and less depressed, with narrower eyes, longer antennae, and stouter posterior tibiae, and with different tibial combs. Also allied to *M. rosseola* Mars., of Japan, but the latter has the posterior tibiae and tarsi more slender, with the internal tibial spur less than half as long as the first tarsal joint, and is more closely punctate both above and beneath.

29. *Mordellistena buxtoni*, sp. n. (Text-fig. 7).

Ferruginous, covered with moderately dense and long, subdepressed pubescence. Eyes with base not much shorter than lateral margin, the distance between them about equal to twice the width of one of them (as viewed from in front). Antennae long, extending to about the middle of the posterior femora; joints 2 to 4 equal in length, short, obconical; joints 5 onwards longer than 3 and 4 together, and parallel-sided. Posterior tibiae stout, apex about one-third as long as posterior side; latter with two oblique combs above the short subapical one, the first extending from close to apex nearly half way up the tibia and nearly reaching the middle of the outer face, the 2nd similar, extending from a little above the first to a point about midway between the upper termination of the first and the base of the tibia; a third shorter comb is sometimes present (Text-fig. 7). Inner spur reaching beyond the middle of the 1st tarsal joint, the outer spur less than half as long; tarsal combs 3, 2, 2. Cauda elongate, acute.

Long. 3 mm.

Upolu: Apia, ii., iii., viii.-ix., xi.1924; Aleipata, iv.1924.

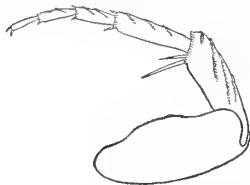
Tutuila: 760-1200 ft., iv., vi., xii.1918 (Kellers); Pago Pago, 9.ix.1923 (Swezey and Wilder).

(Paratypes in Bishop Museum, Honolulu, and in Coll. F. Muir.)

Rather paler than *M. samoensis*, and considerably smaller, differing notably in the shape of the eyes and in the arrangement of the combs on the posterior tibiae. The female apparently differs only in the antennae and cauda being somewhat shorter.

30. *Mordellistena swezeyi*, sp. n.

Fuscous or fuscotestaceous, with the fore part of the head, the sides of the thorax and the legs paler, the elytra blackish, with an indeterminate discal pale streak. Antennae moderately stout, all the joints subequal in length, the 3rd more slender than the 2nd or 4th; pygidium slender, slightly sinuous; tibial and tarsal combs black, tibial combs 2 in addition to the short subapical one, the upper longer comb running from about the apical quarter of the



TEXT-FIG. 7.—*Mordellistena buxtoni*, sp. n.; posterior leg.

posterior edge to about the middle of the outer face, at about one-third of its length ; tarsal combs 3.2.0.

Length : $2\frac{1}{3}$ mm.

Upolu : Malololelei, vi., xi.1924 ; Leulomega and Tuaefu, ix.1923 (Swezey and Wilder).

Tutuila : Pago Pago and Fagasa, ix.1923 (Swezey and Wilder ; and Kellers).

Manua : Tau, ix.1923 (Swezey and Wilder).

(Paratypes in Bishop Museum, Honolulu, and in Coll. F. Muir.)

Allied to *M. gracilicauda* Blr., of Fiji, but larger and more robust, as well as differently coloured.

31. *Mordellistena kellersi*, sp. n.

Black, with an oblique testaceous basal patch on each elytron, including the shoulder but not reaching the scutellum, and not quite meeting its fellow at about the basal 3rd ; at about the posterior 3rd is a broad transverse band of golden pubescence, the derm beneath it being obscurely reddish, the suture remaining narrowly black. Antennae fuscous, stout, extending little beyond the basal angles of the prothorax, the first four joints slender, the rest stout, not twice as long as wide. Cauda slender, slightly arcuate, posterior tibial combs 3, the uppermost much longer than the other two, running nearly across the outer face and almost reaching the base ; tarsal combs 3.2.0.

Length : $2\frac{1}{2}$ mm.

Upolu : Malololelei, vi.1924.

Tutuila : iv.1918 (Kellers) ; Fagasa, 9.ix.1923 (Swezey and Wilder), 1 example from each locality.

(Paratypes in Bishop Museum, Honolulu, and in Coll. F. Muir.)

Closely allied to *M. swezeyi*, from which it differs in markings. The example from Fagasa varies a little from the type in having the head and thorax largely testaceous. Also allied to *M. signatus* Mars., of Japan, but rather larger and more densely pubescent.

32. *Mordellistena nigrescens*, sp. n.

Dark brown, almost black, with a rather coarse, dark, sericeous pubescence, the base of the antennae, the anterior legs and all the tarsi testaceous. Antennae with the four basal joints slender, the others thicker, subequal, rather

more than twice as long as wide. Cauda straight, moderately stout. Tibial and tarsal combs much as in *M. kellersi* m., but the middle tibial comb more intermediate in length.

Length : $2\frac{1}{2}$ mm.

Upolu : Tuaefu, ix.1923 (Swezey and Wilder).

Tutuila : iv., vi.1918 (Kellers).

Savaii : Safune, v.1924 (Bryan).

(Paratypes in Bishop Museum and in Coll. F. Muir.)

Resembling the foregoing species in antennal structure and in the comb formula, but differing entirely in colour.

Family : RHIPIPHORIDAE.

Csiki, *Coleopt. Cat.* (Junk, pars 54), 1913.

33. *Pelecotonoides* (*Micropelecotoides*) *fulvosericanus* Fairmaire.

Pet. Nouv. Ent., ii, p. 279, 1878.

Upolu : Apia, i.1925 ; Vailima, vi.1925 ; Malololelei, vi.1924.

Tutuila : Pago Pago, 14.xii.1925 ; Amauli Road, 5.ix.1923 (Swezey and Wilder) ; iv.1918 (Kellers).

A very variable series, alike in size as in colour. Fairmaire gives the length as from $4\frac{1}{2}$ –6 mm., whereas the specimens forming the series before me range from $2\frac{1}{2}$ –5 mm. In colour, two of the examples from Tutuila and one from Upolu are almost uniformly rufocastaneous, while the others are more or less infuscate, in some cases with vague indications of striping on the elytra. Further examples in the British Museum from Fiji, the Tonga Is., and the Ellice Is. include uniformly rufocastaneous and striped forms, while one female is entirely black with greyish sericeous pubescence and the usual faint striping on the elytra. Provisionally I regard all of these as forms of one variable species, but when longer series become available this opinion may have to be revised.

Family : OEDEMERIDAE.

Schenkling, *Coleopt. Cat. Oedem.* (Junk, pars 65), 1915.

In point of numbers, both of individuals and of species, the family Oedemeridae occupies a prominent position in the coleopterous fauna of

Melanesia and Polynesia. The number of genera represented, however, is but small, and the differences between them are not always very readily perceived. The number of species is considerable for an insular fauna, though in appearance they resemble one another very closely. The difficulty of recognition, and the considerable range in distribution of many of the species have inevitably resulted in considerable confusion in determination, and unfortunately, apart from Seidlitz's revision of the whole family in *Naturgeschichte der Insecten Deutschlands* (1899), no revision of the Pacific fauna exists.

Five species were recorded from Tahiti by Fairmaire (*Rev. Zool.*, pp. 454–457, 1849), under the genera *Nacerdes* and *Selenopalpus*, all but one of which have since been recorded by Schenkling from Samoa (*Arch. f. Nat.*, Bd. 88, A. 10, p. 153, 1922.)

The three very similar genera may be distinguished as follows :

1. (2) Mandibles simple at apex, projecting considerably beyond labrum, and overlapping when closed	<i>Sessinia</i> Pasc.
2. (1) Mandibles bifid at apex, scarcely projecting beyond labrum, inter- locking when closed	3
3. (4) Palpi simple in both sexes ; only 5 visible abdominal segments in ♂ ; sexes scarcely distinguishable	<i>Ananca</i> Fairm.
4. (3) Last joint of maxillary palpi in ♂ excavate on outer side towards apex ; 5th abdominal segment of ♂ abbreviated, exposing genital armature	<i>Pselaphanca</i> Blair.

34. *Ananca kanack* Fairmaire (Text-fig. 8).

Rev. Zool. (2), I, p. 454, 1849 (*Nacerdes*).

Sessinia kanak Fairm., Schenkling, *Cat. Col. Oedem*, p. 33, 1915.

Upolu : Apia, 14.ix.1923, 15 examples (Swezey and Wilder).

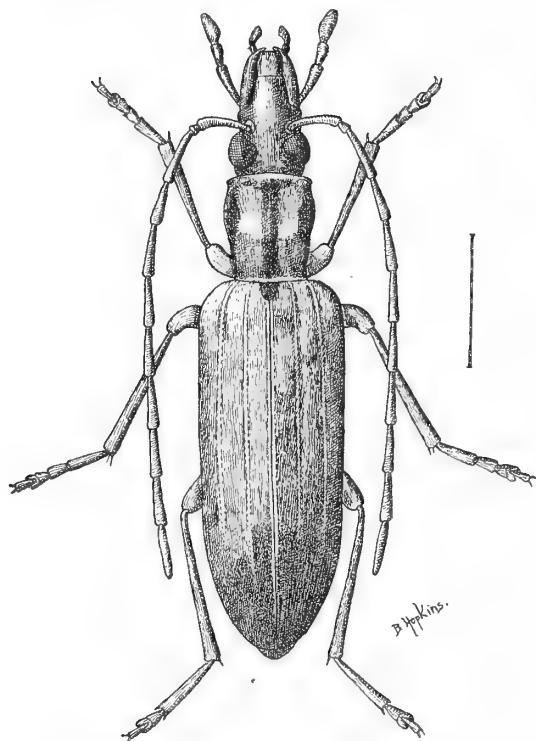
Tutuila : Pago Pago, 14.ix.1923, 1 example (Steffany).

Readily recognisable on account of its large size (about 18 mm.), in conjunction with the form and coloration of the thorax, which is depressed dorsally, with a narrow median strip and a lateral strip on each side bluntly raised, these raised areas being fuscous. The sexual differences are very slight, the 5th ventral segment being entire, bluntly rounded at the apex and usually closely applied to the pygidium. If these be separated, the 6th ventral in the ♂ is seen to be flat, with a deep median emargination. Fairmaire remarks that, among his four species of *Nacerdes*, he has not been able to find a single ♂.

The British Museum possesses specimens from Tahiti, Fiji, the Solomon

Is., New Caledonia, Mysol, etc., with one example labelled "Sandw. Is." (Fry Coll.), no doubt in error for "Samoa Is."* Fairmaire records this insect as

flying in the evening in the huts, and as having once been taken on *Hibiscus* flowers, but rare.



TEXT-FIG. 8.—*Ananca kanack* Fairmaire.

shining; in *A. bicolor* the general surface of the thorax is finely alutaceous.

35. *Ananca bicolor* Fairmaire.

Op. cit., p. 456 (*Nacerdes*).

Upolu: Apia, v., vi.1924, 14.ix.1923 (Swezey and Wilder); Lalomanu, xi.1924; Tafua Volcano, 1917 (Swale).

Tutuila: Pago Pago, 12.viii.1924, 30.ix.1923 (Swezey and Wilder).

The Samoan series of this species differs constantly in coloration from those from Tahiti, the Ellice Is., and the Marquesas group, being darker (brownish), but appears to agree with them in sculpture. Schenkling (*loc. cit.*) considered *S. decolor* (probably incorrectly identified) to be practically

* See *Uloma cavicollis* (p. 76).

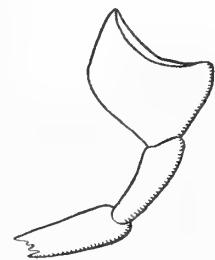
synonymous with *S. livida* F., and Fairmaire himself owned to some difficulty in distinguishing his new species from small forms of *S. livida*; unfortunately this author does not appear to have observed the mandibles. I am indebted to M. Pierre Lesne for kindly comparing a specimen from the Marquesas Is. with the type in the Paris Museum.

37. *Pselaphanca lateritia* Fairmaire (Text-fig. 9).

Rev. Zool. (2), I, p. 457, pl. 11, fig. 5, 1849 (*Selenopalpus lateritius*);
Blair, *Ann. and Mag. Nat. Hist.* (9), xx, p. 165, 1927.

Upolu: Malololelei, vii.1925, 1 ♀ (Wilder).

The British Museum series is from Tahiti, Rarotonga, and Moorea, Society Is., Feb. 1913 (C. S. Betton). This species was recently obtained in some numbers at light on Tahiti, sea level to 2000 ft., iii., iv.1925, and Raiatea, sea level (C. L. Collenette and Miss E. L. Cheesman, St. George Expedition).



TEXT-FIG. 9.—*Pselaphanca lateritia* Fairmaire; maxillary palpus, ♂.

38. *Sessinia livida* Fabricius.

Syst. Ent., p. 14, 1775 (*Lagria*).

Upolu: Apia, v.-ix.1924, 21 examples; Aleipata, Lalomanu, xi.1924, 1 example; Tafua Volcano, 2 examples (Swale).

Tutuila: Pago Pago, ix.1924, 2 examples (Swezey and Wilder).

Ellice Is.: Funafuti and Nui, ix.1924.

Tonga: Nukualofa, ii.1925, 4 examples.

This is a rather widely distributed Polynesian species, ranging westwards to Fiji and the Ellice Is.; type locality, Tahiti. In the specimens before me, there seems to be considerable variation, both in size and in puncturation, but I am unable to separate them specifically.

The sexes, as in *Ananca*, are difficult to distinguish without dissection, but the 5th ventral segment in the female is a little more pointed than in the male. Further, in general appearance, the resemblance between these genera is very close, but in *Sessinia* Pasc., of which this species is the genotype, the mandibles are simple at the apex, with the tips overlapping when closed, and more gradually curved along their outer side so as to project considerably beyond

the labrum ; in *Ananca* the tips of the bifid mandibles interlock and scarcely project beyond the labrum. The puncturation of thorax and elytra in *Sessinia* is usually much finer, and the elytral costae are scarcely indicated.

Family : CIIDAE.

Cioidae, Dalla Torre, *Coleopt. Cat.* (Junk, pars 30), 1911.

39. *Cis savaiiensis*, sp. n.

♂, oblong, blackish piceous, glabrous ; head with the front margin angularly produced and up-turned above each antennal base ; thorax coarsely and closely punctate, scarcely shining, the front margin strongly rounded but not produced above head, a little flattened in the middle, but not emarginate, lateral margins rather widely explate and reflexed ; all angles rounded ; elytra shining, with large punctures irregularly distributed, usually appearing more or less hexagonal in shape.

Long. $1\frac{1}{2}$ mm.

Savaii : Safune, rain forest, 2000-4000 ft., 3.v.1924, 2 examples (Bryan).
(Paratype in Bishop Museum, Honolulu.)

Comparable with *C. porcatus* Shp., of Hawaii, with which it agrees in the shape of the head, but the first joint of the club of the antennae not noticeably smaller than the middle one. The thorax is much more coarsely and closely punctate than in the Hawaiian species, with distinct reflexed lateral margins. The elytra are entirely different ; the punctures are larger than those of the thorax, but much more widely spaced, sometimes almost adjacent one to another, sometimes with comparatively wide intervals ; the punctures deeply set, with interspaces rather strongly convex, giving each puncture a more or less hexagonal appearance.

40. *Cis tutuilensis*, sp. n.

Oblong, brownish testaceous, glabrous ; anterior margin of head lobate and reflexed above each antennal base ; thorax moderately nitid, finely and rather remotely punctate, anterior margin strongly rounded but not produced, emarginate in middle ; lateral margins narrowly but distinctly reflexed.

Elytra with irregular double puncturation, the larger punctures very shallow, the interstices shining, with scattered, very fine punctures.

Length : 1½ mm.

Tutuila : Pago Pago, 9.ix.1923, 2 examples (Swezey and Wilder).

(Paratype in Bishop Museum, Honolulu.)

Allied to *C. pacificus* Sharp, which it resembles in the form of the head and in the puncturation both of the thorax and elytra, except that, in the case of the larger punctures of the elytra, there is less tendency to seriate arrangement. It differs, however, in the shape of the elytra, which in *C. pacificus* are parallel-sided for about two-thirds of their length, then very bluntly rounded at the apex. In *C. tutuilaensis*, they are more rounded at the sides, widest about the middle, thence sharply narrowed to form an acutely rounded apex. Still more closely allied is *C. cheesmanae*, recently described by me * from a specimen from the Marquesas Is., but the latter is larger and more robust, with the sides of the thorax more strongly rounded and more narrowly reflexed. From the European *C. nitidus* Hbst., it differs more widely in having the side borders of the thorax more strongly reflexed and completely visible when the insect is viewed from above.

Scolytocis, gen. nov.

Antennae 9-jointed, 3rd joint long and slender, 4th very small, 5th and 6th submoniliform, 7th and 9th forming a short compact club. Tibiae sparsely and finely denticulate on outer side.

Genotype, *S. samoensis*, sp. n.

A peculiar genus, resembling *Tropicis* Scott (*Trans. Linn. Soc.*, xix, p. 30, Fig. 3, 1926) in the short antennae with broad compact club, and also in the denticulations of the outer edge of the tibiae. From *Tropicis*, however, the present genus differs in there being one joint less in the funiculus of the antennae, and in the non-carinate elytra. The tarsi appear to be 3-jointed, though there may be a minute basal joint.

41. *Scolytocis samoensis*, sp. n.

Testaceous, glabrous, moderately nitid. Head with the supra-antennal lobes little developed, not reflexed, not more prominent than the clypeus

* *Annals and Mag. Nat. Hist.* (9), xx, p. 167, 1927.

between them ; labrum exposed. Antennae very short, joints 3 to 6 together only about half as long as the club. Prothorax strongly arched in front, widest a little before base, the sides finely marginate, but margins not reflexed and running gradually into the arch of the anterior edge ; basal angles completely rounded ; disc strongly, not very closely punctate, the interspaces nitid, with minute puncturation discernible only under strong magnification. Elytra seriate punctate, punctures large but rather shallow, with distinct intervals between them ; the five dorsal striae turn a little outwards towards the base, the 5th meeting the 8th at the shoulder, 6th and 7th abbreviated ; humeri completely rounded, the upper epipleural carina running gradually into the basal carina ; epipleurae gradually narrowed behind, disappearing about the middle ; apex rather acute. Wings ample. First abdominal sternite rather longer than the next two together, intercoxal process narrow, acute, finely bordered.

Length : 1 mm.

Tutuila : Pago Pago, 9.ix.1923, 1 example (Swezey and Wilder).

(Type in Bishop Museum, Honolulu.)

The single example is very defective, with but one remaining tarsus, yet presents so many interesting features as to justify description. The absence of a frontal tubercle and of a tubercle on the first abdominal segment, in conjunction with the slight development of the front of the head indicate that the type is a female.

Family : LYCTIDAE.

42. *Lyctus brunneus* Stephens.

Ill. Brit. Ent. Mandib., iii, p. 117, pl. 18, fig. 4, 1830 (England).

L. disputans Walker, *Ann. Mag. Nat. Hist.* (3), ii, p. 206, 1858 (Ceylon).

L. costatus Blackburn, *Trans. R. Soc. S. Austral.*, x, p. 265, 1888 (Australia).

L. rugulosus Montrouzier, *Ann. Soc. Ent. France*, 4, i, p. 266, 1861 (Woodlark Is.).

L. carolinae Casey, *Ann. N. York Ac. Sci.*, vi, p. 13, 1891 (U.S.A.).

Upolu : Apia, v., vi. ; Malololelei, 25.iv.1924.

Tutuila : Leone Road, 24.iii.1926 (Judd.).

Commonly known as the Powder-Post Beetle, this destructive woodborer is now almost universally distributed, and has been many times described from

specimens from different parts of the world. Stephens's original specimen was taken in a wasp's nest.

43. *Minthea rugicollis* Walker.

Ann. Mag. Nat. Hist. (3), ii, p. 206, 1858 (*Ditoma*).

M. similata Pascoe, *Journ. Ent.*, ii, p. 141, 1863 (Saylee).

Lyctus seriehispidus Kiesenwetter, *Deutsch. Ent. Zeits.*, xxiii, p. 319, 1879 (Japan).

Eulachus hispidus Blackburn, *Trans. R. Dublin Soc.* (2), iii, p. 141, 1885 (Hawaii).

Tutuila : Amauli, 5.ix.1923, 1 example (Bryan).

Except that it does not seem to have been recorded from the New World, this species, of which the type locality is Ceylon, appears now to be almost as widely spread as the preceding.

Family : BOSTRYCHIDAE.*

44. *Rhizopertha dominica* Fabricius.

Ent. Syst., 1, 2, p. 359, 1792 ; Lesne, *Ann. Soc. Ent. France*, lxvi, figs. 13, 21, 27b, p. 332, 1897.

Bostrichus moderatus Walker, *Ann. Mag. Nat. Hist.* (3), iii, p. 260, 1859.

(?) *Bostrichus exiguum* Walker, *loc. cit.*

Upolu : Apia, ii.1925, 1 example.

Found throughout the warmer parts of the world, occasionally in Europe and even in Britain, but introduced with timber, grain, etc., and not established. The last two names quoted above are additional to the synonymy given by Lesne.

45. *Xylothrips religiosus* Boisduval.

Voy. Astrol., p. 460, 1835 ; Lesne, *Ann. Soc. Ent. France*, lxix, p. 624, ff. 32, 473, and 475-477, 1901.

Upolu : Apia, throughout the year, by almost all collectors ; Malololelei, 1 example.

Tutuila : Fagasa (Swezey and Wilder) ; Leone Road (Judd).

Widely distributed in Melanesia and Polynesia, as well as in Northern Australia and Hawaii. Lives in the Bread-fruit tree (*Artocarpus incisa*) and in *Hibiscus tiliacea*, and is also destructive to worked woods of various kinds (Fairmaire).

* A useful revision of this family by P. Lesne appeared in the *Ann. Soc. Ent. France*, 1896-1909.

46. *Xylopsocus castanoptera* Fairmaire.

Apate castanoptera Fairmaire, *Rev. Zool.* (2), ii, p. 50, 1850 ; Lesne, *op. cit.*, p. 635 (*Xylopsocus*).

Samoa (Swale).

This species, the type of which was obtained in Tahiti, is recorded by Lesne from New Guinea, Sunda Is., Assam, Madagascar, and E. Africa. It also occurs in Hawaii and Fiji.

Family : ANOBIIDAE.

Pic, *Coleopt. Cat.* (Junk, pars 48), 1912.

47. *Lasioderma serricorne* Fabricius.

Ent. Syst., i, p. 241, 1792.

Tutuila : Pago Pago, 9.ix.1923, 1 example (Swezey and Wilder).

A cosmopolitan storehouse pest, commonly known as the "Cigarette Beetle" on account of the damage caused by it to dried tobacco.

Family : LYCIDAE.

Melaneros Fairmaire.

Fairmaire, *Petit Nouv. Ent.*, ii, p. 173, 1879 ; *Journ. Mus. Godeffr.*, xiv, p. 100, 1879.

In this genus as originally proposed were placed six species, one stated to have been found in Samoa, while the other five were said to have been met with in Fiji and Tonga Tabu. By the kindness of Herr Hans Gebien and the authorities of the Hamburg Museum, I have been able to examine the types of four of these species, viz. *M. acuticollis*, *M. atroviolaceus*, *M. quadraticollis*, and *M. angustiformis* ; the types of *M. praelongus* and *M. lugubris* apparently cannot now be found at Hamburg.

The types examined bear the following labels :

M. acuticollis, Upolu, No. 6013 (1 ♀).

M. atroviolaceus, Upolu, No. 6013 (a series of 2 ♂♂ and 2 ♀♀).

M. quadraticollis. Three specimens numbered respectively 11399, 4239, and 4512, the two former from Tonga, the last without locality.

M. angustiformis, Tonga, No. 4239 (1 ♀).

This material, however, seems to represent two distinct genera separable as follows :—

Upper surface clothed with moderately dense and long dark pubescence ; alternate intervals of elytra not strongly costiform ; head more or less exposed beyond prothorax ; 3rd joint of antennae about equal to 4th. (Genotype, *M. atroviolaceus* Fairm.) *Melaneros* Fairm.

Upper surface glabrous ; alternate intervals of elytra strongly costate ; head almost completely concealed beneath prothorax ; 3rd joint of antennae only about half as long as 4th. (Genotype, *M. acuticollis* Fairm.) *Samoaneros*, gen. nov.

Unfortunately *M. acuticollis*, the species placed first by Fairmaire, does not agree with his generic description in which the 3rd joint of the antennae is said to be not less than the following ; I have therefore selected *M. atroviolaceus* as the type of *Melaneros*.

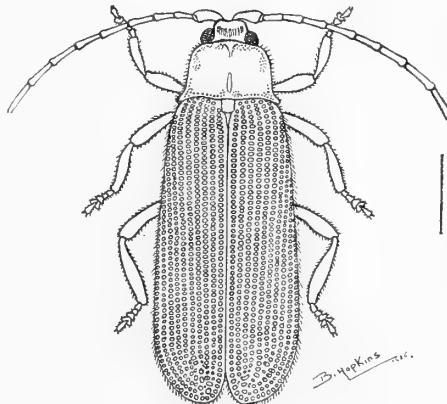
48. *Melaneros atroviolaceus* Fairm (Text-fig. 10).

Loc. cit.

Upolu : Malololelei, 5.i., 25.ii., 18.iv., 25.vi., 28.xi.1924 ; Vailima, vi.1924 ; Tafua Volcano, 1917 (Swale).

Savaii : Safune, lowlands to 1000 ft., 1.v.1924 ; rain forest, 2000–4000 ft., 2–13.v. ; Salailua, Lowlands to 1000 ft., 16.v.1924 (Bryan).

The type was stated to be from Fiji, but each specimen in the type series from Hamburg (No. 6013) bears the label "Upolu," and agrees exactly with the material now before me. Further, in the considerable amount of material received of late years from Fiji, both by the Museum and by the Imperial Bureau of Entomology, nothing resembling the present species has ever appeared, so that it may, I think, safely be assumed that the Fiji record is erroneous.



TEXT-FIG. 10.—*Melaneros atroviolaceus* Fairmaire.

49. *Melaneros quadraticollis* Fairmaire, *loc. cit.*

M. angustiformis Fairm., *loc. cit.*

Upolu: Malololelei, iv., vi.1924, 26.iv. (Bryan), 24.vi. (Armstrong); Vaea, 1100 ft., 25.vi. (Bryan).

Savaii: Safune, lowlands to 1000 ft., 1.v.1924, and rain forest, 2000-4000 ft., 2.v.; Salailua, 22.v.1924 (Bryan).

Tutuila: Pago Pago, 30.ix.1923 (Swezey and Wilder), 18.vi.1924 (Bryan).

Manua: Tau, 20.ii.1926 (Judd).

M. quadraticollis, as stated above, is represented in the series at Hamburg by three specimens, but only one of these, No. 11399 with the locality "Tonga," agrees with the description in the form of the thorax "angulis posticis nullo modo productis." The second specimen, No. 4239 also with locality "Tonga," is undoubtedly conspecific with the individual, bearing the same number and data, purporting to be the type of *M. angustiformis*, which, in my opinion, in spite of the posterior angles of the thorax being somewhat produced, is specifically inseparable from No. 11399.

The third example, No. 4512, without "type" label or indication of locality, is entirely different, being what I consider a small example of *M. acuticollis* Fairm. It is, however, this example, though now ranged with *M. quadraticollis*, that accords best with Fairmaire's description of *M. angustiformis*.

M. angustiformis Fairm. The unique type at Hamburg bears the number 4239, with locality (in my opinion erroneous) "Tonga," but this specimen is undoubtedly conspecific with the similarly labelled specimen of *M. quadraticollis*, and furthermore does not accord with the description of *M. angustiformis*, which is stated to have the posterior angles of the thorax "sat acute divaricatis" and the elytra "sutura et utrinque costulis 4 leviter elevatis, intervallis biserratis grosse punctatis," data which would appear to have been taken from the third specimen, No. 4512, now placed with *M. quadraticollis*. This individual, however, is entirely distinct, coming into the proposed new genus *Samoaneros*, and being in my opinion but a very small example of *S. acuticollis* Fairm. In view, therefore, of this ambiguity concerning the identity of *M. angustiformis*, and its apparently composite character, together with the fact of its putative type being indistinguishable from *M. quadraticollis*, it seems best to consider it as synonymous with this species.

M. quadraticollis is very similar in sculpture to *Plateros robustus*, Klne., of Malacca, but in the latter species the 3rd antennal joint is much shorter than the 4th, and the thorax lacks the anterior median carina.

Samoaneros, gen. nov.

Very similar in facies to *Melaneros* Fairm., having the body usually black or blackish piceous and elytra dark violet blue, but differing in having the upper side glabrous or almost so, while the under side, legs, and antennae are clothed with a fine, depressed, fulvous pubescence. The head is more completely concealed from above beneath the prothorax, and the 3rd joint of the antennae is only about half as long as the 4th. The elytra are usually much more strongly costate, the suture, 3rd, 5th, and 7th interstices being strongly raised, the intermediate interstices usually irregular and ill-defined. The thorax has a strong median carina on the anterior half which divides posteriorly to enclose a deep, broad sulcus communicating behind with the transverse basal sulcus. In *Melaneros*, the anterior costa is relatively feeble and disappears posteriorly, while the median posterior sulcus is narrow, without raised borders, and closed behind.

From *Plateros* Bourg. the new genus differs owing to the upper surface being glabrous, and the elytra strongly costate.

Genotype, *Melaneros acuticollis* Fairm.

50. Samoaneros acuticollis Fairmaire (Text-fig. 11).

Loc. cit. (Melaneros).

Upolu: Malololelei, ii., iv., vi., vii.1924, 18 examples; Aleipata, Lalomanu, x.1924; Tuaefu, 16.ix.1923, 2 examples (Swezey and Wilder); Afiamalo, 11.vii.1925, 2 examples (Wilder).

Savaii: Safune, from lowlands to the rain forest, 2000-4000 ft., 23 examples; Salailua, 3 examples, all v.1924 (Bryan).

Tutuila: Leone Road, 24.iii.1926, 1 example (Judd); Fagasa, 9.ix.1923, 2 examples; and Pago Pago, 18.ix.1923, 1 example (Swezey and Wilder).

Manua: Tau, 20, 21.ii.1926, 6 examples (Judd); Ofu, 27.ii.1926, 2 examples (Judd).

A very puzzling series ranging in length from 5 to 10 mm. The shape of the thorax also varies considerably, being much more strongly transverse in

some examples than in others, and in some having the sides more contracted in the middle and the posterior angles more divergent and more strongly produced. The elytral sculpture is no less varied ; usually, as in the type, the double series of foveae between the costae are strongly transverse with fairly regular parallel divisions, forming more or less regular secondary costae between the primary ones. Frequently a secondary costa is interrupted and irregular, and occasionally disappears altogether, leaving a single series of transverse foveae between the primary costae, as in the genus *Xylobanus*. Rarely, in large specimens, the foveae are larger and more quadrate,

TEXT-FIG. 11.—*Samoaneros acuticollis*
Fairmaire.

but the five examples of this form before me, no two of which are alike, show as wide a range of variation as the more numerous finely foveolate form, and come from the same localities, so that for the present I am unable to consider them as other than aberrant individuals.

M. praelongus Fairm. is perhaps but a small form of the present species, with the anterior margin of the thorax rounded.

51. *Samoaneros muiri*, sp. n.

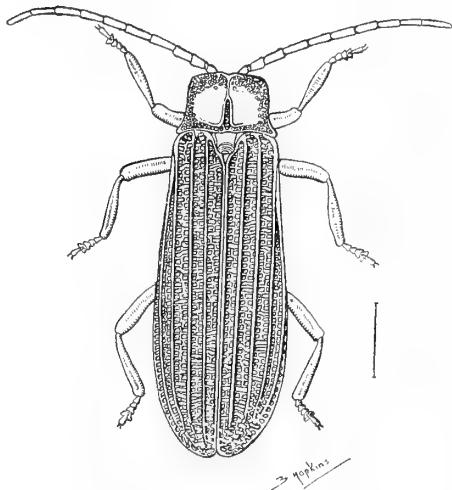
Fulvous, with the antennae (except the three basal joints), tarsi and disc of the elytra smoky brown.

Length : 7-8 mm.

Tutuila : centre of island, 900-1200 ft., 1 ♂, 1 ♀, eastern end of island, 1070 ft., 1 ♂, 21.vi.1918 (Kellers).

(Paratypes in Bishop Museum, Honolulu, and in Coll. F. Muir.)

In form and sculpture very similar to *S. acuticollis* Fairm., but differing entirely in colour. The blackish-brown colour occupies all the dorsal area of the elytra except the extreme base, the anterior portion of the suture, and the



lateral border, *i.e.* it includes the greater part of the 3rd dorsal costa, but scarcely extends beyond it. That it is not a colour variety of *S. acuticollis* is shown by slight differences in structure, *e.g.* the thorax is almost straight in front, more constricted in the middle, and nearly as wide in front as at the base, the double series of foveae of the elytral intervals are finer, and the external (subhumeral) interval is wider and more irregularly punctate towards the base. Moreover, the normal small form of *S. acuticollis* occurs also on Tutuila, and the differences apart from colour, though slight, are evident enough.

Melaneros lugubris Fairm., the type of which, as already stated, apparently is no longer to be found at Hamburg, is probably intermediate in colour between *Samoaneros muiri* and *S. acuticollis*, being described as “ fuscus, parum nitidus, subtus fusco-lutescens, . . . elytrorum costis externis pallidioribus ; ” but it differs in having the thorax almost pentagonal.

Family : MELYRIDAE.

52. *Carphuroides pectinatus* Sharp.

Trans. R. Dublin Soc. (2), iii, pp. 157, 241, 284, t. 4, fig. 20, 1885 ; Champion, *Annals and Mag. Nat. Hist.* (9), xii, p. 46, pl. 1, figs. 14, 14a, 1923.

Samoa, 1 ♂ (Whitmee, 1875).

Described from a specimen from Hawaii, as doubtfully indigenous. Champion notes the occurrence of the species in Timor, Borneo, China, and N. India.

53. *Carphurus flavipes*, sp. n.

Black, with the basal six joints of the antennae, the base of the thorax, an indeterminate band across the middle of the elytra, and the legs yellow. Head almost impunctate, antennae slender, feebly serrate, basal joint rather short, swollen, 2nd joint almost as thick, about as long as wide, 3rd and 4th successively narrower, thence slightly increasing in thickness to apex. Thorax about as long as wide, the greatest width in front and rather strongly narrowed to base ; anterior part convex, but broadly depressed behind, the base itself feebly rounded and bordered. Elytra much wider at base than base of thorax, nearly twice as long as together broad, the sides almost parallel, the disc strongly and

densely punctate and not very densely pubescent. Four segments of the abdomen exposed beyond elytra, clothed with a rather scanty flavous pubescence.

Length : $2\frac{1}{2}$ mm.

Upolu : Malololelei, iv.1924, 1 ♀.

In the absence of the ♂, it is not possible to determine the position of this species in the genus, but it is probably near *C. Rouyeri* Pic.

Family : CLERIDAE.

Schenkling, *Coleopt. Catal.* (Junk, pars 23), 1910.

54. *Cylidrus cyaneus* Fabricius.

Mant., i, p. 126, 1787.

Savaii : Safune, lower forest, 1000–2000 ft., 11.v.1924, 1 example (Bryan). Samoa (Whitmee, 1875).

A widely distributed species in the tropics of the old world, ranging from Tahiti to Central Africa. It has been reported to prey upon *Xylothrips religiosus* Boisd., and probably upon other Bostrichidae.

55. *Tarsostenus univittatus* Rossi.

Faun. Etrusc., i, p. 147, 1792.

Upolu : Apia, v.1924, 1 example.

Another cosmopolitan species, known in Europe to be predaceous upon *Lyctus* spp., which it seems to have followed almost all over the world.

56. *Necrobia rufipes* De Geer.

Mém., v, p. 165, pl. 15, fig. 4, 1775.

Upolu : Apia, iv., v., xii.1924 (in dried currants from New Zealand); Malololelei, 28.vi.1924 (Armstrong); Aleipata, Lalomanu.

Savaii : Fagamalo, 10.ii.1924.

Tutuila : Fagatoga, 29.iii.1926 (Judd).

Manua : Tau, 25.ii.1926 (Judd).

Niue, 6.viii.1918 (Kellers).

Commonly known as the "Copra-beetle," and carried everywhere by shipping ; frequently occurs also among old bones, hides, etc., and as a predator amongst various articles of commerce, including cereals.

Family : RHIPICERIDAE.

57. *Callirhipis femorata* Waterhouse (Text-fig. 12).

Trans. Ent. Soc. Lond., p. 386, 1877 ; Fairmaire, *Ann. Soc. Ent. France*, (6), i, p. 271, 1881.
? *C. samoensis* Pic, *Mélanges exot.-ent.* fasc. 33, p. 20, 1921.

Samoa (Coll. Whitmee, type).

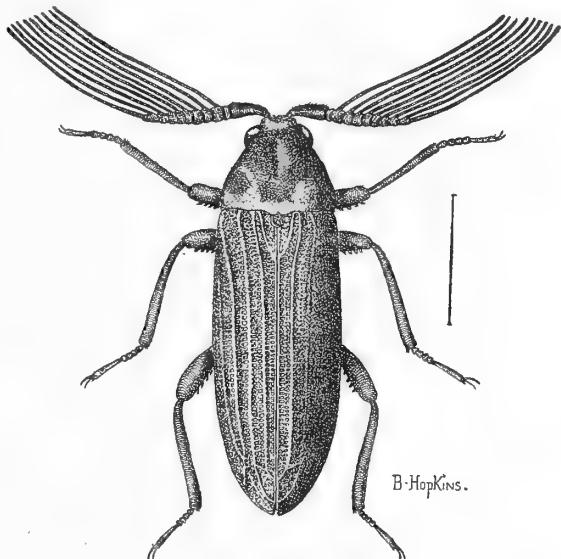
Upolu : Apia, i., ii., v., vi.-ix.
1924 ; Malololelei, 22.iv.1925.

Tutuila : Fagatoga, 29.iii.1926
(Judd), and xii.1918 (Kellers).

Nassau Is.

Appears to be practically confined to Samoa, whence it has been received in almost every collection sent in. Pic's type was a ♀, of which sex I have only two specimens before me, as compared with 20 ♂♂ ; but in the brief description there is nothing to show that it is distinct from *C. femorata* W., though probably not fully mature.

From outside the Samoa Group, I have seen only a single ♂, from Nassau Is., in the Union Group (Buxton and Hopkins).



TEXT-FIG. 12.—*Callirhipis femorata* Waterhouse.

Family : BUPRESTIDAE.

Kerremans, Wytsman's *Gen. Insect. Buprest.*, 1902.

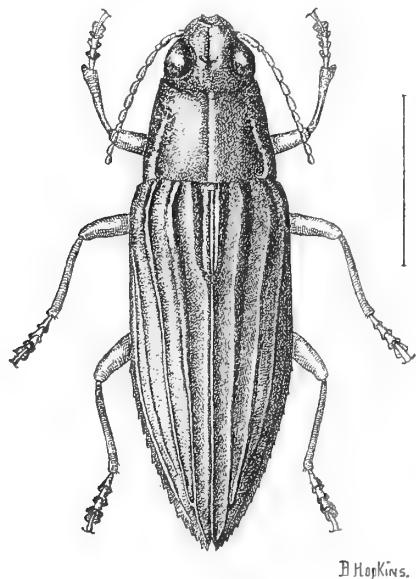
„ *Monog. Buprest.*, Vols. i-vii, 1904-1914.

Obenberger, *Coleopt. Cat.* (Junk, pars 84), 1926 (incomplete).

58. *Callistroma samoensis* Saunders (Text-fig. 13).

Cist. Ent., i, p. 222, 1874 (*Paracupta*).

C. oxyptera Fairmaire, *Pet. Nouv. Ent.*, ii, p. 153, 1877.



TEXT-FIG. 13.—*Callistroma samoensis*
Sndrs.

Upolu : Apia, 16.iii.1925.

Savaii : Safune, 15.v.1924 (Bryan).

Samoa : 1897 (Whitmee).

Saunders's type is in the British Museum ; that of Fairmaire is probably at Hamburg, though a specimen labelled "Type," received from Fairmaire, is in the Kerremans Coll. at the British Museum.

59. *Cyphogastra abdominalis* Waterhouse.

Ann. Mag. Nat. Hist. (5), xv, p. 381, May 1885.

Cyphogastra auriventris Kirsch, *Berl. Ent. Zeit.*, xxix, Bd., p. 114, July 1885 ; Heller, *Arch. Nat.*, 88, Bd., A, 10, p. 153, 1922.

„ *gloriosa* von Heyden (? Gestro), *Abhandl. Senckenb. Naturforsch. Gesell.*, 36 Bd., p. 171, 1915.

Upolu : Apia, viii.1924, 7 examples, and 24.xii.1922, 1 example (Armstrong) ; 18.v.1917 (Swale) ; iii.-viii.1921 (O'Connor).

Originally recorded from Duke of York Is. and otherwise known only from the Bismarck Archipelago and the Admiralty Group ; its occurrence elsewhere only in Samoa is remarkable. Whether it be really distinct from *C. gloriosa* Gestro, of New Guinea, is a point that I cannot venture to discuss without going into the whole question of species, subspecies, etc., in this genus ; provisionally I follow Kerremans in separating the two species.

(N.B.—*C. abdominalis* Waterh. (*Ann. Mag. Nat. Hist.* (6), x, p. 412, 1892) of Damma Is., is a very different insect, and is identical with *C. staudingeri* Kerr. (*Mém. Soc. Ent. Belg.*, vii, p. 65, 1900).)

60. *Chrysobothris chrysonota* Deyrolle (?).

Ann. Soc. Ent. Belg., viii, p. 110, 1864.

Upolu : Apia, 18.iv.1924, 1 example (defective).

The single specimen, lacking the tips of both elytra, agrees with an example from Duke of York Is., so determined in Coll. Kerremans, in having the metallic spots on the elytra cupreous, the abdomen beneath cupreous on the sides and aeneous or viridiaeneous in the middle, the emargination of the terminal segment subtruncate, and the median carina scarcely projecting into it ; but differs in having the thorax more nitid, much less strongly rugose transversely, and the elytra more strongly punctate. In thoracic sculpture it closely resembles *C. auropunctata* Deyr. (det. Kerremans), but the latter has the elytral spots greenish golden, the puncturation much finer and closer, and the under side bluish-green.

It is unfortunate that this species cannot be exactly determined, since it marks a distinct advance eastward of the Melanesian section of this widely distributed genus. Geographically its nearest allies occur in Woodlark Is., but to only one of these, *C. purpureicollis* Kerr., does it appear to be at all closely related ; the species in question differs, *inter alia*, in having the elytra more nitid and more finely and sparsely punctate, the sub-sutural carina less sharply elevated, the metallic spots greenish, and the last ventral segment with a strong median projection in the terminal emargination.

61. *Agrilus indignus* Fairmaire.

Rev. Zool. (2), I, p. 353, 1849.

Upolu : Apia, 7.v.1924, vi., vii.1925, 12.ix.1923, x.1924, 1 example each date ; Tafua Volcano, 19.vii. (Swale).

Tutuila : Pago Pago, 2, 14.xii.1924, on leaves of *Hibiscus tiliacea*, 16 examples, ix.1923, 3 examples (Swezey and Wilder), 19.iv.1924 (Bryan) ; Amauli, 5.ix.1923 (Bryan) ; Leone Road, 18.ix.1923, 1 example (Swezey and Wilder) ; Afono Trail, 25.ix.1923, 1 example (Swezey and Wilder).

Tonga : Nukualofa, 23.ii.1925, 3 examples, and Neiafu, Vavau, 9.iii.1925, 1 example.

A Polynesian species, the type of which was taken in Tahiti ; it was

recently collected in numbers in Tahiti and the Marquesas Group by the members of the "St. George" Expedition.

62. *Agrilus samoensis*, sp. n. (Text-fig. 14).

Elongate, dark bronze coloured, with front of head and sides of thorax aeneous, under side greenish-bronze, elytra with somewhat indistinct maculations of pale pubescence.

Frons moderately flat, with a transverse low ridge, with reduced sculpture, about halfway up. Thorax widest a little behind its front margin, with sides

feebly sinuate, posterior angles right angles, and with a strong curved carina; disc finely ridged transversely, with fine punctures between the ridges, median line with two impressions. Scutellum transversely carinate, the ends of the carina curving rearwards. Elytra rounded and denticulate at the tips, with the usual imbricate sculpture very fine; a scanty, ashy-grey pubescence on an indistinctly more metallic ground produces the following patterns: a band along the suture behind the scutellum, curving round the latter to the basal impression; a pair of very indistinct spots obliquely placed, one just behind the basal impression, the other behind and to the

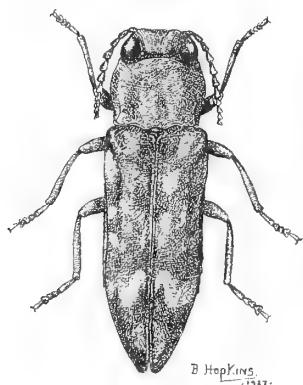
outside of it; a similar pair of spots at about one-third of the length, and a more distinct pair behind the middle; about halfway between this and the tip, an oblique row of three confluent spots forming a zigzag band, the spot nearest the suture the largest, and just before the tip an indistinct oblique band; the tip beyond this band more brilliantly bronzy. Posterior tarsi longer than half the tibia, the points of the inner branches of the claws moderately approximate.

Long. 8 mm.

Upolu: Apia, x.1924; Malololelei, iv., 21.vi., 28.xi.1924, 1 example on each date.

(Paratype in Bishop Museum, Honolulu.)

Closely allied to *A. evanidus* C. and G., of Java, according to a specimen so determined and marked "compared with type" by Saunders; but the species



TEXT-FIG. 14.—*Agrilus samoensis*, sp. n.

so determined by Kerremans, both in his own collection and in that of Mr. H. E. Andrewes, now in the British Museum, is a very different insect, very close to, if not identical with, *A. acutus* Thunb. Saunders's specimen differs from the Samoan species in its greener colour, and in having the scutellar carina straight, the imbricate sculpture of the elytra distinctly coarser, the pubescent maculation different, and the tips of the elytra redder. The maculation on the anterior half of the elytra is more irregular and formed of a greater number of smaller spots, while the posterior zigzag band is produced backwards along the suture to meet or nearly meet the subapical band. Other closely allied species are *A. tonkineus* Kerr., *A. obesus* Kerr., *A. marmoreus* Deyr., and *A. occipitalis* Esch.

LIST OF TEXT-FIGURES.

Text-fig. 1. *Apteromerus convexus* Fairmaire.
,, 2. *Menimus samoensis*, sp. n.
,, 3. *Tagalus swalei*, sp. n.
,, 4. *Chariotheca sulcipennis*, sp. n.
,, 5. *Mordellistena consimilis* Blair; posterior leg.
,, 6. , , *samoensis*, sp. n. , ,
,, 7. , , *buxtoni*, sp. n. , ,
,, 8. *Ananca kanack* Fairmaire.
,, 9. *Pselaphanca lateritia* Fairmaire; maxillary palpus, ♂.
,, 10. *Melaneros atroviolaceus* Fairmaire.
,, 11. *Samoaneros acuticollis* Fairmaire.
,, 12. *Callirhipis femorata* Waterhouse.
,, 13. *Callistroma samoensis* Sndrs.
,, 14. *Agrilus samoensis*, sp. n.

ELATERIDAE

BY R. H. VAN ZWALUWENBERG

(With 10 Text-figures.)

THE family Elateridae is represented in the present collections from the British Museum and the Bishop Museum by fourteen species, distributed among eight genera, two of which are here described as new. Six new species appear to be endemic in the Samoan Islands: the remaining eight species are known also to occur in other localities, as is shown in the following table.

SPECIES.	KNOWN DISTRIBUTION OUTSIDE SAMOA.
<i>Lacon modestus</i> (Boisd.)	Cosmotropical.
<i>Propsephus tongaënsis</i> (Cand.)	Tonga, Phoenix Is.
<i>Propsephus rufipes</i> (Schwarz)	Tonga.
<i>Propsephus euænsis</i> (Schwarz)	Tonga.
<i>Propsephus major</i> (Cand.)	Fiji.
<i>Simodactylus cinnamomeus</i> (Boisd.)	Throughout Oceania.
<i>Monocrepidius pallipes</i> (Esch.)	Phoenix Is., Hervey Is., Society Is., Polynesia generally.
<i>Melanoxanthus melanocephalus</i> (Fab.)	Southern Asia and adjoining islands from Arabia to China, Polynesia.

One additional species, *Simodactylus tasmani* Cand., previously known to occur in Fiji, is here noted as having been found in the Ellice group, but is not included in the material from Samoa.

The literature on Samoan Elateridae is extremely scanty; only two references are known to me:

1901. O. Schwarz: *Deutsche Ent. Zeitschr.*, Jahrg. 1901, p. 351. "Von (*Anchastus*) *Psephus tonga nsis* liegen mir vom Hamburger Museum (Mus. Godeffroy) 2 Exemplare auch aus Samoa vor."
1908. D. Sharp: *Fauna Hawaiianensis*, iii, p. 369. Notes that *Ischiodontus hawaiensis* Cand. (Elater. nouv., iii, p. 42, 1881) is wrongly labelled as coming from the Hawaiian Islands, the real locality being the Samoan Islands.

AGRYPNINAE.

1. *Lacon modestus* (Boisduval).

Voy. Astrolabe, Col., p. 108, 1835 (*Agrypnus*) ; *Fauna Océanie*, p. 108, 1835.

Four specimens : Apia, Upolu, i.1925, and ix.1924 ; Malololelei, Upolu, iv.1924 ; "Samoa," 10.vi.1917 (Swale).

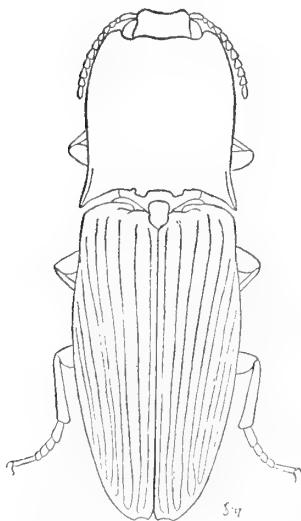
Cosmotropical.

Hyslop * has shown that the *Adelocera* of authors should be *Lacon*, and *vice versa*.

HEMIRRHIPINAE.

2. *Alaus samoensis*, sp. n. (Text-fig. 1).

19.5 mm. long ; 6 mm. wide across elytra ; elytra less than twice as long as head and thorax. Light castaneous, with darker indefinite longitudinal suffusion on the prothorax. Uniformly covered with brown-cinereous squamules. Head deeply, triangularly impressed with the frontal margin recurved. Antennae reddish-brown. Prothorax longer than wide, not medianly carinate ; sides slightly and evenly arcuate ; gently convex with vague impression on either side just within the subtruncate anterior angles ; declivous at base. Posterior angles divergent, strongly carinate. Scutellum declivous, elongate pentagonal. Elytra widened to about their middle, thence narrowed to the apex, which is emarginate, the angles being even and obtuse. Third interval with a longitudinal carina extending anteriorly to about the middle of the scutellum, slightly divergent anteriorly. Striae finely but plainly punctate, the intervals flat. Body beneath, concolorous with upper surface. Sides of mesosternal cavity not raised. Holotype, female (?), Apia, Upolu, 23.vii.1924. Described from a single specimen.



TEXT-FIG. 1.—*Alaus samoensis*, sp. n.

* J. A. Hyslop, "Genotypes of the Elaterid Beetles of the World :" *Proc. U.S. Nat. Mus.*, vol. 58, pp. 621-680, 1921.

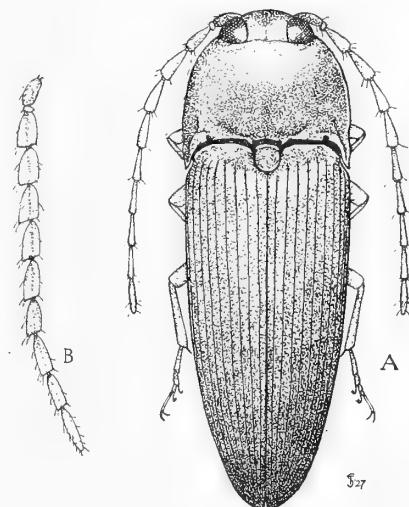
The specimen before me is somewhat rubbed, presenting an irregular asymmetrical maculation where denuded. The basal joint of the antenna may be darker brown than the rest of that organ, but is covered with balsam.

This species approaches *A. infumatus* Cand. and *A. angularis* Cand. in Candèze's key, but is without a longitudinal prothoracic carina, and the apical emargination of the elytra is not spiniform at the angles.

DICREPIDIINAE.

3. *Propsephus upoluensis*, sp. n. (Text-fig. 2).

Male : 14.0 mm. long ; 4 $\frac{1}{3}$ mm. wide. Moderately shiny. Dark castaneous, with elytra slightly more reddish. Lateral margins of prothorax, lateral and sutural margins of elytra, rufous ; antennae light brown, basal joint darker. Pubescence creamy, moderately coarse, semi-erect. Head coarsely punctate, shallowly concave ; short, feeble, median carina on occiput. Antennae strongly compressed, long, exceeding half the length of the body, strongly serrate from third joint onwards. Third joint as long as fourth and similar in shape ; joints three to five broad, their width greater than half their length. Prothorax coarsely and closely punctate, especially on the sides ; distinctly wider than long, depressed ; sides gently arcuate ; posterior angles not divergent, arcuate, with tips recurved outward ; strongly unicarinate. Sulci well-marked but short. Scutellum coarsely punctate, flat, broadly rounded posteriorly. Elytra as wide as prothorax, parallel to about middle, thence conjointly narrowed to apex. Striae feebly impressed, intervals flat, with relatively coarse punctuation. Body beneath slightly darker than above, with tarsi rufous. Mucro strongly curved behind coxae. Propleurae strongly concave beneath lateral margins of prothorax. Second and third tarsal joints



TEXT-FIG. 2.—*Propsephus upoluensis*, sp. n. ; A, dorsal aspect of male ; B, antenna of male.

strongly lamellate. Coxal lamina rounded at its widest point. Holotype male, Malololelei, Upolu, 2000 ft., 21.iv.1925. Described from a single specimen.

This species is readily distinguishable from its congeners by its long, flattened antennae (Text-fig. 2, A), with very broad segments along their mid-length. This character may be subgeneric.

4. *Propsephus tongaensis* (Candèze).

Elatérides nouv., ii, p. 25, 1878 (*Anchastus*).

„ „ iii, p. 42, 1881 (*Ischiodontus hawaiiensis*).

Thirty specimens as follows :

Twenty-four males : "Pacific, Sandwich Is.," Fry Collection (three specimens); "Pacific, Sandwich Is.," Fry Collection; Samoa, Janson Coll. (two specimens); Tuasivi, Savaii, xi.1925; Tuaefu, Upolu, ix.1923 (Swezey and Wilder); Mulifanua, Upolu, 16.vii.1923 (Wilder); Falelatai, Upolu, 11.vi.1924; Apia, Upolu, ii.1924; Lalomanu, Aleipata, Upolu, xi.1924; Tafua Volcano, Upolu, 1917 (Swale, three specimens). Pago Pago, Tutuila, 0-300 ft., iv.1918 (Kellers, *ex coll.* W. M. Giffard, two specimens); Tutuila, 1200 ft., xii.1918 (Kellers, *ex coll.* W. M. Giffard); Leone Road, Tutuila, 19.ii.1924 (Bryan); Leone Road, Tutuila, 24.iii.1926 (Judd); Pago Pago, Tutuila, 9.ix.1923 (Swezey and Wilder); Pago Pago, Tutuila, 2.xii.1924.

Seven females : Apia, Upolu, i.1925; Malololelei, Upolu, iv.1924; Mulifanua, Upolu, 9.xi.1925; Tafua Volcano, Upolu, 1917 (Swale); Samoa, 15.i.1917 (Swale). Amauli, Tutuila, 9.v.1923 (Swezey and Wilder). Hull Is., Phoenix Is., 24.iii.1924 (Bryan).

The four specimens from the Fry Collection are of particular interest. Concerning them Mr. K. G. Blair writes : "... *Ischiodontus hawaiiensis* Cand. This species was described from specimens sent to Candèze by Fry, and the specimens with Fry's labels evidently formed a part of Fry's series that was not sent to Candèze. They are thus practically equivalent to co-types. On the latter's labels, as you will see, the locality appears as 'Sandw. Islands,' which I believe to be a misreading of 'Samoa Islands.' This same mistake applies also to other beetles belonging to groups with which I am more familiar, and which I am sure never came from the Sandwich Islands. . . ." Further, Dr. David Sharp (*Fauna Hawaiiensis*, Vol. iii, p. 369) remarks concerning *Ischiodontus* : "So far as we know, there is no *Ischiodontus* in the Sandwich Islands. From information received from Mr. Gahan, of the British Museum

(Natural History), it appears certain that the insects in the Fry Collection, which Candèze described as *I. hawaiiensis*, were wrongly labelled as coming from the Sandwich Islands, the real locality being the Samoa Islands."

These four specimens conform perfectly to Candèze's description of *P. tongaënsis*. Therefore, in view of the geographical error involved, and the practically co-type value of the series, it seems safe to synonymize *I. hawaiiensis* under the older name.

5. *Propsephus rufipes* (Schwarz).

Deutsche Ent. Zeitschr., p. 351, 1901 (*Psephus*).

Seven specimens, all males, as follows :

Pago Pago, Tutuila, 2.xii.1924. Nukualofa, Tonga, 16.ii.1925 ; 14.ii.1925 ; 22.ii.1925, 23.ii.1925 ; Neiafu, Vavau, Tonga, 5.iii.1925, 8.iii.1925.

The type locality is Tongatabu.

6. *Propsephus euænsis* (Schwarz).

Deutsche Ent. Zeitschr., p. 352, 1901 (*Psephus*).

Four specimens in the Bishop Museum collections :

Male, Tutuila, 1200 ft., 21.vii.1918 (Kellers, *ex coll.* Giffard).

Females, Pago Pago, Tutuila, 0-300 ft., iv.1918 (Kellers, *ex coll.* Giffard), two specimens ; Pago Pago, Tutuila, ii.1924 (Bryan).

The type locality is Eua, Tonga Is.

The male genitalia of *P. rufipes* and of *P. euænsis* show no differences which I can distinguish.

7. *Propsephus major* (Candèze).

Elatér. nouv., ii, p. 25, 1878 (*Anchastus*).

Sixteen males and twenty-three females, as follows :

Males, all from Upolu : Malololelei, 2000 ft., ii., iii., iv., vi., vii., xi.1924-25 (various collectors, thirteen specimens) ; Apia, xii.1924 ; Mulifanua, 16.vii.1925 (Wilder) ; Samoa (Janson Coll.).

Females, from Upolu : Malololelei, ii., iii., iv., vi., vii., ix., and xi. (various collectors, seventeen specimens) ; Apia, i.1925, 29.ii.1924, ix.1924 ; Tafua Volcano, 1917 (Swale, 2 specimens) ; Aleipata, iv.-v.1924. Females, island not specified : Samoa, 1917 (Swale) ; Samoa, iii.-viii., 1921 (F. W. O'Connor) ;

Samoa, Janson Coll. (two specimens) ; "Pacific, Sandwich Is., Fry Collection." (This last locality is doubtless an error and should refer to the Samoan Is. See remarks above by Mr. K. G. Blair and the late Dr. David Sharp.)

The original description gives Fiji as the locality, not Togatabu (Tonga-tabu) as stated in the *Genera Insectorum* and in Schenkling's Catalogue.

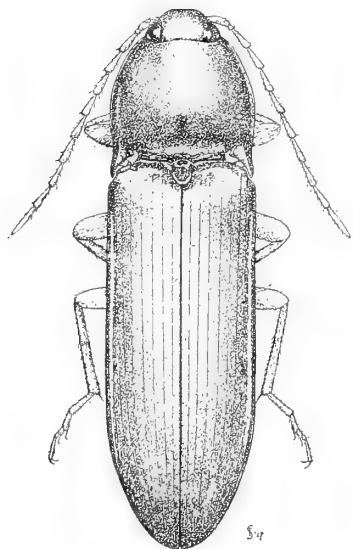
This is the species represented most numerously in the collections.

8. *Propsephus gracilicornis*, sp. n. (Text-fig. 3).

Female : 20.0 mm. long ; 5.5 mm. wide.

Shiny, uniformly reddish-brown, with head and antennae darker brown. Pubescence sparse, fine and moderately long.

Head convex ; frontal margin broadly rounded ; moderately punctate.



TEXT-FIG. 3.—*Propsephus gracilicornis*, sp. n., female.

Antennae slender, elongate, over one-third the length of the body, joints three to ten equal in length ; feebly serrate. Prothorax moderately and fairly closely punctate, wider than long. Sides widely arcuate from posterior angles to anterior margin. Posterior angles sinuate, narrower than greatest width of prothorax itself, not divergent, strongly unicarinate, canaliculate on posterior half ; sulci divergent. Scutellum with sides nearly straight ; broadly rounded posteriorly, medianly carinate, coarsely punctate. Elytra as wide as prothorax ; with wide impression near base ; parallel to beyond middle ; apex rounded, briefly mucronate at sutural angle ; striato-punctate ; intervals nearly flat. Sternum darker brown than upper body-surface. Muero moderately curved behind coxae. Lamina of posterior coxa (Text-fig. 4, A)

rounded at widest point, the outer projection not produced posteriorly as far as the inner. Second and third tarsal joints strongly lamellate.

Holotype female ; Malololelei, Upolu, 2000 ft., 22.iii.1925. Described from a single specimen.

This species is readily separable from its Polynesian congeners by its very

elongate, feebly serrate antennae (Text-fig. 4, B). The individual antennal joints are relatively long, their width being plainly less than half their length in even



TEXT-FIG. 4.—*Propsephus gracilicornis*, sp. n.; A, ventral view of hind coxal plate; B, antenna of female.

the most robust (joints three to five). The antennae suggest an *Adiaphorus*, but the suddenly widened coxal lamina, and the curved mucro distinguish the species from that genus.

KEY TO SAMOAN SPECIES OF PROSEPHUS.

1. Antennae conspicuously slender or elongate	2
1A. Antennae normal and of moderate length	3
2. Antennal joints very wide; prothorax strongly transverse	<i>upoluensis</i> , sp. n.
2A. Antennal joints very slender; scutellum carinate	<i>gracilicornis</i> , sp. n.
3. Prothorax broadly arcuate on sides	<i>euaënsis</i> Schw.
3A. Prothorax not broadly arcuate on sides	4
4. Large insects, at least 15 mm.; colour blackish	<i>major</i> Cand.
4A. Smaller insects; brown to rufous	5
5. Small insects, 9–11 mm.	<i>tongaënsis</i> Cand.
5A. Larger insects, not less than 11 or over 13 mm.	<i>rufipes</i> Schw.

The separation of *P. tongaënsis* and *P. rufipes* upon size alone is admittedly unsatisfactory, since long series tend to intergrade in this respect. However, what I consider to be *P. rufipes* are all males, and are larger than even the females of *P. tongaënsis*. The possible identity of *P. rufipes* Schw. with *P. tongaënsis* Cand. can only be decided by reference to the types, which I have been unable to examine.

Lamononia, genus novum.

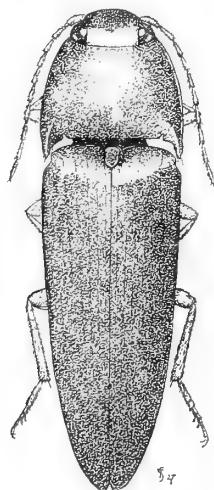
Front with transverse carina; mouth parts directed forward and downward. Antennae slender, serrate from third joint onwards; second joint small; third and fourth joints equal. Prothorax narrowed anteriorly; sternopleural sutures double, excavate in front. Mucro bent sharply upwards between the coxae. Mesosternal cavity perpendicular, strongly carinate medianly. Lamina of hind coxa strongly narrowed outwardly; a strong blunt tooth at about the middle of its posterior margin. Tarsi with second and third joints strongly lamellate. First joint of posterior tarsus only slightly longer than the next three joints together. Claws simple.

Genotype: *Lamononia monticola*, sp. n.

The relation of this genus to *Propsephus* is the same as that of *Spilus* to *Ischiodontus*. The strongly bent mucro distinguishes the new genus from

Spilus, *Ischiodontus* and *Pantolamprus*, while the perpendicular mesosternal cavity makes confusion with *Propsephus* impossible (Text-fig. 6, A).

The genus is named in memory of Lamonon, the French naturalist of the ill-fated *La Pérouse* expedition, who, with others from the *Astrolabe*, was murdered by natives on Tutuila in December, 1788.



TEXT-FIG. 5.—*Lamononia monticola*, sp. n., male.

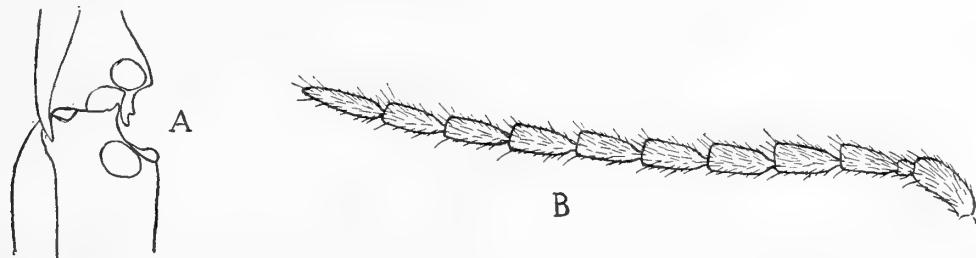
Male: 13.5 mm. long; 4 mm. wide. Elongate, shiny, dark brown, with the lateral margins of the prothorax, the median part of the scutellum, the base, lateral margins and sutural margins of the elytra, rufous. Antennae rufous. Pubescence luteous, moderately thick. Front flat; moderately punctate. Prothorax wider than long, slightly convex; sides evenly narrowed from the base of the posterior angles to the anterior margin. Posterior angles strongly unicarinate, sinuate but not divergent; tips acute. Punctuation moderately fine, closer on the sides than on the disc, but not coarser. Scutellum subpentagonal, arcuate in front, sinuate on sides, shiny, very finely punctate. Elytra slightly narrower than prothorax, subparallel to about their middle,

9. *Lamononia monticola*, sp. n. (Text-fig. 5).

Male: 13.5 mm. long; 4 mm. wide. Elongate, shiny, dark brown, with the lateral margins of the prothorax, the median part of the scutellum, the base, lateral margins and sutural margins of the elytra, rufous. Antennae rufous. Pubescence luteous, moderately thick. Front flat; moderately punctate. Prothorax wider than long, slightly convex; sides evenly narrowed from the base of the posterior angles to the anterior margin. Posterior angles strongly unicarinate, sinuate but not divergent; tips acute. Punctuation moderately fine, closer on the sides than on the disc, but not coarser. Scutellum subpentagonal, arcuate in front, sinuate on sides, shiny, very finely punctate. Elytra slightly narrower than prothorax, subparallel to about their middle,

thence narrowed to apex. Striae vague on disc; intervals flat, coarsely punctate. Apex diverging from sutural line, finely mucronate. Ventral surface of body dark brown, more shiny than above, with finer pubescence. Legs, epipleurae, prosternal lobe and sterno-pleural sutures, rufous. Mucro bent at right angles between coxae, with the intercoxal area concave. Mesosternal cavity perpendicular, with median longitudinal carina extending back to the meso-metasternal suture. Coxal lamina strongly dilated inward, with the bluntly rounded outer tooth prolonged to the line of the inner pair.

Female: 14 mm. long; 4.25 mm. wide. Similar to male in coloration, pubescence and punctuation. More robust than male, with elytra relatively much narrower than prothorax. Prothorax slightly more convex than in male,



TEXT-FIG. 6.—*Lamnononia monticola*, sp. n.; A, lateral view of mucro and mesosternal cavity; B, antenna of male.

with sides broadly and evenly arcuate. Elytra narrowed from base to middle, thence more strongly to apex.

Two specimens: Holotype male, Malololelei, Upolu, 2000 ft., 23.xi.1924; allotype female, Malololelei, Upolu, 2000 ft., 28.xi.1924.

In the male the pubescence of the antennae (Text-fig. 6, B) is longer and thicker than in the female, but not definitely erect as in the males of some species of *Spilus*.

PACHYDERINAE.

10. *Simodactylus cinnamomeus* (Boisduval).

Faun. Océanie, Col., p. 106, 1835 (*Aeolus*).

Four specimens:

Male, Apia, Upolu, 13.ix.1923 (Swezey and Wilder).

Females, Apia, Upolu, iv.1924, 7.v.1924; Samoa, vi.1917 (Swale, two specimens).

The pubescence is somewhat finer in these specimens than in those taken in Hawaii, but this character is of trifling importance in view of the extreme variability of the species as regards the outline of the prothorax and of the coxal lamina, not to mention coloration and punctuation.

Generally distributed in Oceania as far north as the Hawaiian Is.

10A. *Simodactylus tasmani* Candèze.

Elatérides nouveaux, fasc. v, p. 24, 1893.

Two specimens: Nui, Ellice Is., 21.ix.1924, male (?); Nukufetau, Ellice Is., 20.ix.1924, male. No examples of this species were collected in Samoa.

The Nukufetau specimen is lighter brown than usual, but it is distorted and appears to be immature.

The type of the species was obtained in Fiji.

Roggeveenia, gen. nov.

Front convex; anterior margin carinate. Antennae of moderate length, feebly serrate. Prothorax narrowed anteriorly, longer than wide, subdepressed, narrower than elytra. Sterno-pleural sutures fine, nearly straight, not excavate. Mucro nearly horizontal. Elytra sharply acuminate at apex. Mesosternal cavity sloping, sides flat. Metathorax not carinate. Metasternal coxal lamina only moderately widened inward. Second tarsal joint simple; dilation of third much reduced, that of the fourth definite but not pronounced.

Genotype: *Roggeveenia buxtoni*, sp. n. (Text-figs. 7, 8, 9).

A Pachyderine with the dilation of the tarsal lobes reduced (Text-fig. 8), and the antennae without a carina on their face; readily distinguishable from the other genera by its sharply acuminate elytra. The male genitalia (Text-fig. 9) are similar to those of *Simodactylus cinnamomeus* Boisd., but are not acutely barbed on the lateral lobes. The last abdominal sternite is emarginate at the apex in the female, entire in the male.

This genus is named in memory of Jacob Roggeveen, the Dutch navigator, who discovered the Samoan islands in 1721, and was thus the first European to sight the group.

11. *Roggeveenia buxtoni*, sp. n. (Text-figs. 7, 8, 9.)

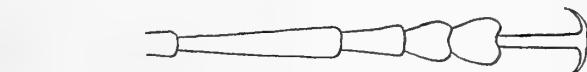
Male: 10.5 mm. long; 3 mm. wide.

Elongate, castaneous, with the vertex and an indefinite median area of the pronotum darker; the base of the elytra flavous, with the basal margin and the circumference of the scutellum nearly black.

Antennae dark castaneous. Pubescence moderately fine, short, ashen white. Front feebly convex, closely and coarsely punctate. Antennae with third and fourth joints similar and of about equal length, feebly serrate. Prothorax depressed on disc, longer than wide. Sides nearly straight and subparallel from posterior angles to anterior third, thence gently narrowed to anterior margin. Punctuation fine and close. Posterior angles strong, divergent, feebly bicarinate, the inner carina the stronger. Base of prothorax not canaliculate. Sulci obsolete. Scutellum declivous, subgival, convex, very finely punctate. Elytra slightly wider than prothorax (except posterior angles), parallel to about middle, thence narrowed to apex, di-

TEXT-FIG. 7.—*Roggeveenia buxtoni*, sp. n.; A, dorsal aspect of male; B, antenna of male.

verging from sutural line toward tip; apex long acuminate. Striato-punctate; intervals flat and finely punctate. Ventral surface of body finely punctate, dark castaneous, with prosternum and legs, except femora, rufous. Sterno-pleural sutures nearly straight, gently curved anteriorly, not excavate. Mucro nearly horizontal, slightly convex between coxae. Mesosternal cavity declivous, sides flat. Posterior coxal lamina moderately widened inward. First joint of posterior



TEXT-FIG. 8.—*Roggeveenia buxtoni*, sp. n., ventral aspect of hind tarsus.

tarsi subequal to the three following joints; third tarsal joint faintly, fourth joint moderately dilated.



TEXT-FIG. 9.—*Roggeveenia buxtoni*, sp. n., aedeagus.

Female: 11 mm. long; 3·2 wide. Similar to male, with prothorax relatively more robust and more closely and finely punctate. Disc of prothorax depressed. Elytra narrowed behind the middle. Legs flavous. Apical margin of last abdominal sternite deeply notched.

Five specimens: Type male, Malololelei, Upolu, 2000 ft., vii.1924. (Genitalia dissected and mounted on same pin.) Paratype males, Malololelei, Upolu, 7.ii.1924 (J. S. Armstrong); Malololelei, Upolu, 2000 ft., vi.1924, and another, same locality, vii.1924. Allotype female, in Bishop Museum collection, Tutuila, 760–900 ft., iv.1918 (H. C. Kellers, *ex coll.* W. M. Giffard).

This species is named in honour of Mr. P. A. Buxton, to whose energy the present volumes on the insect fauna of Samoa are due.

In the series before me, the coloration, especially of the elytra, varies from flavous to reddish-brown; the prothorax of the single female is uniformly plumbeous. The antennae do not attain the tips of the posterior angles of the prothorax, even in the male. The five specimens are nearly uniform in size.

MONOCREPIDIINAE.

12. *Monocrepidius pallipes* Eschscholtz.

In Thon, *Ent. Arch.*, ii, 1, p. 32, 1829.

Seventeen specimens: Salailua, Savaii, 20.v.1924 (Bryan); Savaii, viii.1924 (two specimens); Fagamalo, Savaii, xi.1925. Malololelei, Upolu, 9.vi.1924. Leone Road, Tutuila, 24.iii.1926 (Judd); "Samoa" (Swale); "Samoa Is." (Rev. S. J. Whitmee); "Ins. Samoa," Janson (five specimens); "Samoa," iii.–viii.1921 (O'Connor). Nukualofa, Tonga, 22.ii.1925; Nukualofa, Tonga, 24.ii.1925. In addition, the Bishop Museum has a series of six specimens: Hull Is., Phoenix Group, 24.iii.1924 (Bryan, four specimens); Manua, Hervey Is., v.1925 (Wilder); Papeete, Tahiti, 17.viii.1926 (Wilder).

Candèze gives the distribution as Polynesia. The species is said to be common throughout the year in Tahiti, Society Is., on *Hibiscus tiliacea*, and to be attracted to lights at night.

ELATERINAE.

13. *Melanoxanthus melanocephalus* (Fabricius).

Spec. Ins., i, p. 272, pl. 7, figs. 12, 12a, 1781 (*Elater*).

Six specimens from Apia, Upolu, as follows: iv.1924, viii.1924, ii.1925, iv.1925, vi.1925, x.1925. Five from Baker Is., north of the Phoenix Group, 23.ix.1924 (E. L. Caum).

This species occurs throughout Southern Asia from Arabia to China, and in the adjoining islands, as well as in Oahu of the Hawaiian Group, Mauritius and Bourbon.

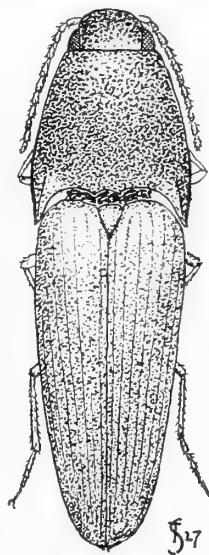
14. *Melanoxanthus comptus*, sp. n. (Text-fig. 10).

5 mm. long; slender. Head and prothorax piceous (frons castaneous, except medianly). Posterior angles, frontal margin of prothorax castaneous; scutellum and elytra castaneous. Legs castaneous; first four antennal joints castaneous, the remainder piceous. Pubescence sparse, short, semi-erect, fine and white. Evenly and thickly umbilicate-punctate.

Head gently convex; frontal margin rounded. Prothorax, including posterior angles, slightly longer than wide, nearly straight on each side, evenly narrowed from about the middle to the anterior margin; from about middle backward to tips of posterior angles sides straight and parallel. Posterior angles wide, strongly unicarinate. Prothorax very convex; faintly canaliculate on basal declivity. Scutellum declivous, triangular. Elytra subequal to prothorax in width; sides parallel to about middle, thence narrowed to apex. Striae strongly punctate; their intervals flat and granulate. Apex subtruncate, with sutural angles finely mucronate.

Two specimens: Holotype, Apia, Upolu, iii.1924. The paratype in the Bishop Museum collection was taken by Swezey and Wilder, Amauli, Tutuila, 6.ix.1923.

The paratype differs in coloration from the holotype, having the prothorax



TEXT-FIG. 10.—*Melanoxanthus comptus*, sp. n.

dark castaneous rather than piceous. Although, according to Candèze's key, this species would appear to be *M. semitinctus* Boh.—the variety with flavo-testaceous elytra, it differs in not having the prothorax canaliculate, and in having the sides of the prothorax nearly straight instead of arcuate.

LIST OF TEXT-FIGURES.

Text-fig. 1. *Alaus samoensis*, sp. n.
,, 2. *Propsephus upoluensis*, sp. n.; A, dorsal aspect of male; B, antenna of male.
,, 3. *Propsephus gracilicornis*, sp. n., female.
,, 4. *Propsephus gracilicornis*, sp. n.; A, ventral view of hind coxal plate; B, antenna of female.
,, 5. *Lamonomia monticola*, sp. n., male.
,, 6. *Lamonomia monticola*, sp. n.; A, lateral view of mucro and mesosternal cavity; B, antenna of male.
,, 7. *Roggeveenia buxtoni*, sp. n.; A, dorsal aspect of male; B, antenna of male.
,, 8. *Roggeveenia buxtoni*, sp. n., ventral aspect of hind tarsus.
,, 9. *Roggeveenia buxtoni*, sp. n., aedeagus.
,, 10. *Melanoxanthus comptus*, sp. n.

MELASIDAE (EUCNEMIDAE)

PAR E. FLEUTIAUX

LES îles du Pacifique n'ont pas toutes été visitées spécialement au point de vue entomologique. Certaines cependant ont donné lieu à des études assez complètes, pour qu'il soit possible de se rendre compte que chaque faune de groupe d'îles présente un caractère particulier et des formes qui lui sont propres.

A n'envisager que la seule famille en cause ici, je citerai pour la Malaisie et la Mélanésie, les travaux de Bonvouloir,¹ qui a eu à sa disposition les chasses de Wallace ; et de moi-même,² d'après les matériaux rapportés par Beccari, d'Albertis, Doria, Modigliani, et Loria.

Ceux de Blackburn³ et de Lea⁴ pour l'Australie.

Ceux de Sharp⁵ et de Broun⁶ pour la Nouvelle-Zélande.

De Fauvel⁷ pour la Nouvelle-Calédonie.

De moi-même⁸ pour les îles Viti et Samoa.

De Sharp⁹ pour les îles Hawaii.

J'ai en outre eu l'occasion d'étudier les Melasidae du Japon¹⁰ des récoltes de Harmand et de Gallois ; ceux des Philippines¹¹ recueillis par le Professeur Baker ; et ceux de l'Indochine française.¹²

Les Melasidae sont parents très proches des Elateridae. Ils s'en dis-

¹ Monographie des Eucnémides (*Ann. Soc. Ent. France*, (4), Vol. x, Suppl., 1870-1875).

² *Ann. Mus. Civ. Genova*, Vol. xxxvi, p. 555, 1896.

³ *Proc. Roy. Soc. Victoria*, Vol. xii, p. 215, 1900.

⁴ *Trans. Roy. Soc. South Australia*, Vol. xl, p. 301, 1916 ; *Proc. Linn. Soc. New South Wales*, Vol. xlivi, p. 725, 1919.

⁵ *Ann. Mag. Nat. Hist.* (4), Vol. xix, p. 486, 1877.

⁶ *Man. New Zealand Col.*, 1880-1893.

⁷ *Rev. d'Ent.*, Vol. xxiii, p. 119, 1904.

⁸ *Bull. Mus. Nat. Paris*, p. 248, 1925.

⁹ *Scient. Trans. Roy. Dublin Soc.* (2), Vol. ii, p. 151, 1885 ; *Fauna Hawaiianensis*, Col., Vol. iii, pt. 5, p. 385, 1908.

¹⁰ *Ann. Soc. Ent. France*, Vol. xci, p. 291, 1923.

¹¹ *Ann. Soc. Ent. France*, Vol. xciv, p. 29, 1926.

¹² *Bull. Soc. Zool. France*, Vol. xlvi, p. 320, 1923.

tinguent surtout par l'épistome continuant la courbure du front ; par le prothorax moins librement articulé ; et souvent par des sillons antennaires plus ou moins profonds sur les propleures.

Leurs larves vivent dans les troncs d'arbre.

GENRES.

1. Bord antérieur du pronotum non caréné	2
Bord antérieur du pronotum caréné. Sillons antennaires des propleures suturaux	<i>Dirhagus.</i>
2. Sillons antennaires des propleures marginaux	3
Sillons antennaires des propleures submarginaux	<i>Porraulacus.</i>
3. Sillons antennaires limités en dedans par un rebord	4
Sillons antennaires non nettement limités en dedans	5
4. Elytres déclives à la base	<i>Fornax.</i>
Elytres déprimés à la base	<i>Dromaeolus.</i>
5. Troisième article des antennes plus long que le deuxième. Sillons antennaires peu profonds	<i>Maelodrus.</i>
Deuxième et troisième articles des antennes courts, égaux. Sillons antennaires profonds	<i>Tacerus.</i>

Maelodrus, nov. gen.

Corps allongé. Antennes filiformes, faiblement épaissies vers le sommet ; troisième article sensiblement plus long que le deuxième. Pronotum plus long que large, arrondi en avant. Elytres graduellement atténués, non striés. Sillons antennaires marginaux, peu profonds, non nettement limités en dedans. Hanches postérieures très élargies en dedans, anguleuses. Dernier arceau ventral brusquement terminé en pointe (♂), ou échantré en cercle (♀). Tarses à quatrième article évidé en dessus pour recevoir le cinquième.

A tout à fait l'apparence d'un *Dromaeolus* de forme allongée, mais les sillons antennaires non limités le rapproche de *Profornax*.

1. *Maelodrus aberrans*, nov. sp.

♂, 4 mm. ; ♀, 5 mm. Etroit, allongé, atténué en arrière ; noir à peine brillant ; pubescence jaune pâle, plus apparente sur la base du pronotum et la suture des élytres, et plus obscure sur les côtés. Tête convexe, densément ponctuée ; épistome plus étroit à la base que la crête surantennaire. Antennes noirâtres ; troisième article beaucoup plus long que le deuxième et que le quatrième, les autres sensiblement égaux. Pronotum plus long que large, subparallèle, sinué latéralement, arrondi en avant, convexe ; ponctuation nette et

peu serrée. Elytres atténués en arrière, non striés, légèrement ponctués. Dessous également noir, finement ponctué ; pubescence régulière. Sillons antennaires peu profonds, mats, non nettement limités en dedans. Saillie prosternale largement arrondie au sommet. Episternes métathoraciques très étroits et parallèles. Hanches postérieures très élargies en dedans et anguleuses, plus larges en dehors que les épisternes. Pattes ferrugineuses.

Upolu : Malololelei, 2000 pieds, mars, juin, novembre 1924. Trois exemplaires. Vailima, 600 pieds, octobre 1924. Un exemplaire.

Présente l'aspect de *Fornax nitidus* Fleutiaux, de Viti ; mais chez celui-ci les sillons antennaires sont lisses et brillants, et nettement limités par un rebord intérieur.

Dromaeolus Kiesenwetter.

Naturgesch. Ins. Deutsch., Vol. iv, p. 197, 1858 ; Bonvouloir, *Mon. Eucn.*, pp. 68 et 193, 1871 ; Fleutiaux, *Ann. Soc. Ent. France*, Vol. lxx, p. 655, 1901 ; Idem, *Ann. Soc. Ent. Belg.*, Vol. lxi, pp. 38 et 98, 1921.

2. *Dromaeolus giffardi*, nov. sp.

4 $\frac{1}{4}$ à 5 mm. Allongé, noir peu brillant ; pubescence jaunâtre sur la base et les côtés du pronotum, et sur la base et la suture des élytres, obscure sur le reste du dessus du corps. Tête convexe, légèrement carénée au milieu, ponctuée ; épistome rugueux, très étroit à la base ; carène interoculaire entière ; palpes ferrugineux, le dernier article des maxillaires épais. Antennes noires, filiformes, dépassant la base du prothorax ; troisième article plus long que les deux suivants. Pronotum plus long que large, faiblement rétréci en avant, ponctué comme la tête. Elytres légèrement arrondis sur les côtés, subgraduellement rétrécis en arrière, non striés, sauf tout à fait à l'extremité, finement ponctués. Dessous également noir ; pubescence jaune légère. Hanches postérieures très élargies en dedans, plus larges en dehors que les épisternes métathoraciques. Pattes noires ; tarses brunâtres.

Samoa : Tutuila, 900–1200 pieds, juin 1918 (H. C. Kellers), Collection W. M. Giffard, Musée de Honolulu. Trois exemplaires.

Chez les exemplaires les plus grands, que je pense devoir être des ♀, les antennes sont moins longues.

Diffère de *D. fairmairei* Fleutiaux, de Viti, par sa forme plus allongée et plus convexe, par sa couleur entièrement noire et son aspect légèrement

brillant ; ses yeux moins saillants, ne faisant pas saillie sur le prolongement des bords latéraux du pronotum.

Fornax Castelnau.

Silbermann, *Rev. Ent.*, Vol. iii, p. 172, 1835 ; Bonvouloir, *Ann. Soc. Ent. France*, 4^e, Vol. x, Part Suppl., p. 69, 1871, et *ibid.*, p. 295, 1872 ; Fleutiaux, *Ann. Soc. Ent. France*, Vol. lxx, p. 655, 1901 ; Idem, *Ann. Soc. Ent. Belg.*, Vol. lx, pp. 38 et 124, 1921.

ESPÈCES DU GENRE FORNAX.

1. Pronotum convexe et rugueux, 12-13 mm.	.	.	.	.	.	.	<i>samoensis.</i>
Pronotum peu convexe, ponctué mais non rugueux.							2
2. Carène interoculaire entière	.	.	.	.	.	.	<i>uniformis.</i>
Carène interoculaire interrompue au milieu sur la base de l'épistome	.	.	.	.	.	.	<i>oceanicus.</i>

3. *Fornax samoensis*, nov. sp.

12-13 mm. Allongé, convexe ; brun ; pubescence jaune. Tête densément et rugueusement ponctuée, légèrement sillonnée au milieu ; épistome aussi large à la base que la crête surantennaire. Antennes ferrugineuses, filiformes ; troisième et quatrième articles égaux, de la même longueur que les suivants. Pronotum à peu près aussi long que large, arrondi sur les côtés et rétréci en avant, convexe, sinué et deprimé à la base, densément et rugueusement ponctué. Elytres arrondis et rétrécis dans la seconde moitié, striés ; interstries légèrement rugueux en avant, beaucoup moins en arrière. Dessous brun rougeâtre. Sillons antennaires profonds, lisses et bien limités en dedans par un rebord. Hanches postérieures très élargies intérieurement, anguleuses, à peu près de même largeur en dehors que les épisternes. Dernier arceau ventral en pointe obtuse. Pattes ferrugineuses ; griffes dentées.

Upolu : Apia, mars, décembre 1924, et octobre 1925. Trois exemplaires.

Voisin de *F. tumidicollis* Redtenbacher ; de forme plus étroite, plus parallèle, plus convexe ; ponctuation de la tête et du pronotum serrée et rugueuse ; antennes plus courtes et tout à fait filiformes ; élytres plus rugueux à la base.

4. *Fornax uniformis* Fleutiaux.

Bull. Mus. Nat. Paris, année 1925, p. 249, 1925.

Upolu : Apia, mars 1924, et avril 1925. Trois exemplaires. Malololelei, 2000 pieds, juin 1924. Un exemplaire.

Exemplaire typique de Viti Lévu.

5. *Fornax oceanicus* Fleutiaux.

Bull. Mus. Nat. Paris, année 1925, p. 249, 1925.

Upolu : Tafua Volcano, 1917 (Swale). Deux exemplaires. Malololelei, 2000 pieds, juin et novembre 1924. Cinq exemplaires. Tutuila : Pago Pago, décembre 1924. Deux exemplaires. Pago Pago, septembre 1923 (Swezey et Wilder), Musée de Honolulu. Un exemplaire. Tutuila, 2141 pieds (H. C. Kellers). Un exemplaire.

Les plus petits individus de 4 à 5 mm. sont les ♂ ; le dernier arceau ventral est entier. Chez les grands, 7 à 8 mm., ♀, le dernier arceau est tronqué ou échancré.

Exemplaires typiques de Viti et de Samoa.

Tacerus, nov. gen.

Corps allongé, fusiforme. Deuxième et troisième articles des antennes courts, égaux, plus minces que les autres, aussi longs ensemble que le quatrième. Pronotum trapézoidal. Sillons antennaires marginaux, profonds, lisses et brillants, non limités en dedans. Premier article des tarses postérieurs aussi longs que les autres réunis.

Ressemble à certains *Ceratus* Bonvouloir,¹ comme *C. nitidus* et *C. luzonicus* Fleutiaux, des Philippines ; mais les sillons antennaires non limités en dedans le rapproche de *Acedax* Bonvouloir ; il en diffère toutefois par sa forme allongée moins convexe, par les sillons antennaires profonds, et par les épipleures des élytres plus rétrécis en arrière.

6. *Tacerus upoluensis*, nov. sp.

7 mm. Allongé, filiforme ; brun noirâtre, un peu rougeâtre sur les bords de la suture et les côtés des élytres ; pubescence jaune roux. Tête convexe, légèrement et densément ponctuée ; carène interoculaire interrompue au milieu ; épistome aussi large à la base que la crête surantennaire, plus fortement ponctué, subrugueux. Antennes ferrugineuses, subfiliformes, atteignant

¹ J'ai précédemment : *Ann. Soc. Ent. France*, Vol. xcv, p. 46, note, et p. 60, 1926, réuni les *Ceratus* aux *Fornax* comme sous-genre. La seule différence qui les sépare est la longueur relative des deuxième et troisième articles des antennes qui sont égaux chez *Ceratus*, tandis que le troisième est toujours plus long chez *Fornax*. J'ai été amené à faire cette réunion par l'inconstance de ce caractère dans une même espèce : *Fornax collega* Bonvouloir, de Sumatra, Bornéo, Philippines.

la moitié du corps. Pronotum trapéziforme, à peu près aussi long que large à la base, peu convexe, légèrement, densément et uniformément ponctué. Elytres graduellement rétrécis en arrière, non striés, très finement et éparsement pointillés. Dessous de même couleur, pubescence semblable. Sillons antennaires profonds, lisses, non limités en dedans. Epipleures des élytres graduellement rétrécis en arrière. Episternes métathoraciques parallèles, plus étroits que les épipleures à la moitié de leur longueur. Hanches postérieures triangulaires, très larges en dedans. Dernier arceau ventral atténué en pointe obtuse et arrondie. Pattes brun ferrugineux ; tarses cylindriques.

Upolu : Malololelei, avril 1925. Un exemplaire.

Porraulacus Fleutiaux.

Ann. Mus. Civ. Gen., Vol. xxxvi, p. 567, 1896 ; Idem, *Ann. Soc. Ent. France*, Vol. lxx, p. 650, 1901 ; Idem, *Ann. Soc. Ent. Belg.*, Vol. lxi, pp. 41 et 144, 1921.

Genre fondé sur une petite espèce, *P. submarginalis*, dont le type unique de Nouvelle-Guinée, Hatam, juillet 1875 (Beccari), est au Musée Civique de Gênes. Depuis, M. le Professeur Baker l'a reprise à Sandakan, Bornéo.

Plus récemment j'ai fait connaître une deuxième espèce, *P. basipennis*, qui fait partie de la collection Fairmaire au Muséum National d'Histoire Naturelle de Paris. Elle y est représentée par deux individus, dont l'un est indiqué d'Ovalau, archipel des Viti, et l'autre de Samoa (Dr. Graff).

On trouvera plus loin les descriptions de deux nouvelles espèces récoltées par MM. Buxton et Hopkins.

Etant donné l'habitat restreint de ces insectes, je crois utile d'en donner ici un tableau de détermination.

J'ai d'abord considéré *Porraulacus* comme un Eucneminae à sillons antennaires submarginaux très distincts. Maintenant que nous sommes en face d'autres espèces dont les sillons ne sont pas toujours bien limités, j'ai tendance à le rapprocher du vieux genre *Hylis* Gozis (*Hypocoelus* Guérin), jusque là placé parmi les Melasinae ; en faisant remarquer toutefois que ce dernier ressemble un peu aux Eucneminae du groupe *Macraulacus*.¹

Il faut signaler que *Porraulacus* présente les mêmes variations dans l'apparence des sillons antennaires que *Proxylobius*,² et qu'il en est également

¹ Fleutiaux, *Ann. Soc. Ent. Belg.*, Vol. ix, p. 93, note b, 1920.

² Fleutiaux, *Ann. Soc. Ent. France*, Vol. xcv, p. 32, note 2, 1926 ; Idem, *Encycl. Ent.*, Col., I, 2, p. 94, note 1, 1926.

très voisin. Dans le génotype, *Proxyllobius helleri*, du Japon, les sillons sont parfaitement limités, alors que chez ses congénères : *P. philippinus*,¹ des Philippines ; *P. orientalis*,¹ de Birmanie ; et *P. sicardi*, de Madagascar par exemple, ils sont nuls ou à peu près, exactement comme chez *Hylis procerulus* d'Europe.

Les genres à sillons antennaires marginaux sont beaucoup plus nombreux, ils présentent les mêmes différences dans la profondeur de ces sillons. C'est ainsi que chez *Scythan insulcatus* Fleutiaux,² des Philippines, et *Plesiofornax perroti* Fleutiaux,³ de Madagascar, ils sont presque nuls.

Le caractère fourni par les sillons antennaires a jusqu'à présent été la base de la classification en sous-famille. Quelle valeur a-t-il réellement ? Bien inconstante, il faut l'avouer. Les Eucneminae (sillons antennaires marginaux ou submarginaux) pourraient très bien se subdiviser, en ce qui concerne les genres à sillons submarginaux,⁴ dont le type serait *Macraulacus*, et où *Porraulacus*, *Proxyllobius*, *Pseudodiacretus* viendraient se ranger.⁵

D'un autre côté *Hylis*, malgré ses propleures marqués d'une faible impression antennaire, est considéré comme un Melasinae (pas de sillons antennaires). Cependant, nous l'avons vu, il n'est pas très éloigné sous ce rapport des *Porraulacus*.

Dans ces conditions on conviendra qu'il n'est pas précisément aisément de conclure sur la séparation exacte des deux sous-familles.

ESPÈCES DU GENRE PORRAULACUS.

1. Corps entièrement noir	2
Corps noir, avec une tache rouge sur la partie antérieure des élytres	3
2. Tête carénée au milieu en avant. Fémurs ferrugineux obscur ou noirâtres	<i>submarginalis</i> . ⁶
Tête non carénée au milieu en avant. Pattes entièrement ferrugineuses	<i>buxtoni</i> .
3. Forme subparallèle. Partie antérieure des élytres rouge	<i>basipennis</i> . ⁷
Forme plus élargie, subelliptique. Elytres avec une assez grande tache rouge humérale	<i>humeralis</i> .

¹ Décrit comme *Xylobius*.

² Fleutiaux, *Ann. Soc. Ent. France*, Vol. xcv, pp. 35 et 70, 1926 ; Idem, *Encycl. Ent., Col.*, I, 2, p. 94, note 1, 1926.

³ Fleutiaux, *Ann. Soc. Ent. Belg.*, Vol. lx, p. 93, note a, 1920 ; Idem, *Encycl. Ent., Col.*, I, 2, p. 94, note 1, 1926.

⁴ Fleutiaux, *Ann. Soc. Ent. Belg.*, Vol. lxi, p. 40, tableau, No. 65, 1921.

⁵ Et peut-être aussi le genre *Talerax*, de Nouvelle-Zélande, au moins partiellement ?

⁶ Fleutiaux, *Ann. Mus. Civ. Gen.*, Vol. xxxvi, p. 568, 1896.

⁷ Fleutiaux, *Bull. Mus. Nat. Paris*, année 1925, p. 250, 1925.

7. *Porraulacus humeralis*, nov. sp.

2·5-3·5 mm. Subelliptique ; noir, avec une grande tache rouge aux épaules ; pubescence jaune, courte et peu serrée. Tête convexe ; ponctuation peu dense ; crête interoculaire anguleuse sur la base de l'épistome ; celui-ci très étroit à la base. Antennes ferrugineuses, moniliformes ; dernier article beaucoup plus long que les précédents. Pronotum convexe, aussi long que large, arrondi et rétréci sur les côtés en avant ; ponctuation régulière. Elytres rétrécis en arrière, conjointement arrondis au sommet, non striés ; ponctuation peu serrée. Dessous noir. Sillons antennaires distincts. Hanches postérieures transversales, subparallèles, insensiblement élargies en dedans, plus larges en dehors que les épisternes métathoraciques. Pattes ferrugineux clair.

Upolu : Apia, avril et décembre 1924. Deux exemplaires. Malololelei, 2000 pieds, mars, avril, juin 1924. Nombreux exemplaires. Mont-Vaea, 1500 pieds, décembre 1924. Un exemplaire. Tutuila : "Center of island" (Kellers). Savaii : Safune, 2000-4000 pieds (Bryan).

Peut se comparer à *P. basipennis*, mais de forme moins parallèle ; la tache rouge des élytres est humérale.

8. *Porraulacus buxtoni*, nov. sp.

2·5-3·35 mm. Oblong ; noir peu brillant ; pubescence jaunâtre très légère. Tête convexe ; ponctuation peu serrée ; crête interoculaire anguleuse sur la base de l'épistome ; celui-ci très étroit à la base. Antennes ferrugineux obscur, plus claires à la base, moniliformes ; dernier article aussi long que les deux précédents réunis. Pronotum convexe, aussi long dans son axe que large à la base, graduellement arrondi et rétréci sur les côtés, ponctué comme la tête, mais moins densément et plus régulièrement. Elytres rétrécis en arrière, conjointement arrondis au sommet, non striés ; ponctuation peu serrée. Dessous de même couleur. Sillons antennaires lisses, indistinctement limités. Hanches postérieures transversales, subparallèles, insensiblement élargies en dedans, un peu plus larges en dehors que les épisternes métathoraciques. Pattes ferrugineuses.

Upolu : Apia, mars 1924. Un exemplaire. Mont-Vaea, 1500 pieds, décembre 1924. Un exemplaire. Aleipata, avril 1924. Deux exemplaires. Malololelei, 2000 pieds, avril, juin 1924. Trois exemplaires. Tutuila : Pago

Pago, décembre 1925. Un exemplaire. Pago Pago, septembre 1923 (Swezey et Wilder). Deux exemplaires.

Savaii : Safune, 2000-4000 pieds. Manua Is. : Tau (Judd).

Chez les petits individus, qui sans doute sont des ♂, les antennes sont plus robustes et plus longues.

Proche de *P. submarginalis* Fleutiaux. Taille plus grande ; tête sans carène frontale au milieu en avant ; sillons antennaires non distinctement limités.

Dirhagus Latreille.

Ann. Soc. Ent. France, Vol. iii, p. 130, 1834 (posthume.). *Microrhagus* Boisduval et Lacordaire, *Faune Ent. Env. Paris*, pp. 620 et 626, 1835.

Génotype : *Elater pygmaeus* Fabricius, 1792.

Le genre *Rhacopus* Hampe,¹ établi pour *R. cinnamomeus* Hampe, 1855 = *Eucnemis sahlbergi* Mannerheim, 1823, est d'une forme plus allongée avec laquelle Reitter a créé un sous-genre sous le nom de *Hyporrhagus*, 1921.² Le nom de *Dichodirhagus*, proposé par Méquignon, 1925,³ s'applique à *Microrhagus pyrenaeus* Bonvouloir, 1872.

9. *Dirhagus hopkinsi*, nov. sp.

4 mm. Allongé, atténué ; noir terne sur la tête et le pronotum, ferrugineux sur les élytres ; pubescence jaune clair, soyeuse. Tête irrégulièrement ponctuée, subrugueuse, légèrement impressionnée en avant ; épistome à peu près de la largeur de la crête surantennaire. Antennes longues, ferrugineuses, légèrement dentées. Pronotum aussi long que large, parallèle, arrondi aux angles antérieurs, très convexe, fortement déprimé aux angles postérieurs et à la base ; ponctuation peu serrée ; carène du bord antérieur brièvement recourbée en rond en arrière ; carène latérale postérieure n'atteignant pas le bord antérieur ; carène des angles postérieurs atteignant la moitié. Elytres non striés, seulement avec une strie suturale ; ponctuation assez forte, peu serrée, subrugueuse. Dessous noir ; dépressions antennaires étroites, subparallèles, lisses, nettement

¹ *Verh. Zool. Bot. Wien*, Vol. v, p. 256, 1855.

² *Best. Tab. eur. Col.*, Heft 90, p. 81, 1921.

³ *Bull. Soc. Ent. France*, année 1925, p. 240, 1925.

limitées. Episternes métathoraciques excessivement étroits en avant, élargis en arrière, un peu moins larges postérieurement que le bord externe des hanches postérieures. Celles-ci subparallèles, faiblement élargies en dedans. Dernier arceau ventral en pointe obtuse. Pattes ferrugineux clair.

Upolu : Apia, avril 1925. Un exemplaire, type. Tutuila : Pago Pago (Swezey and Wilder). Un exemplaire.

De taille plus petite que *D. holosericatus* Fleutiaux, de Viti ; même aspect de forme et de couleur, mais carène marginale du bord antérieur du pronotum recourbée en rond, épisternes élargis en arrière.

Espèces décrites dans le *Bull. Mus. Nat. Paris*, 1925 :

Dromaeolus fairmairei, p. 248. Viti, Ovalau.

Fornax nitidus, p. 248. Viti.

,, *uniformis*, p. 249. Viti Levu.

,, *oceanicus*, p. 249. Viti. Samoa.

,, *vitiensis*, p. 250. Viti Levu.

,, *serraticornis*, p. 251. Viti.

Porraulacus basipennis, p. 250. Viti, Ovalau. Samoa.

Dirhagus holosericatus, p. 251. Viti Levu.

CERAMBYCIDAE

BY CHR. AURIVILLIUS

(With 1 Plate.)

I HAVE to thank Mr. P. A. Buxton for the opportunity of working out the very interesting collection of Cerambycids from the Samoan Is. brought together during the last few years by himself, and Messrs. G. H. E. Hopkins, J. S. Armstrong, H. C. Kellers, A. F. Judd and others.

Thirty-five species of CERAMBYCIDAE are now known to occur in Samoa : their distribution in the Archipelago, and in other groups of islands, is shown in the following table :—

	SAMOA ISLANDS.					TONGA.	FIJI.	TAHITI.	NEW HEBRIDES.	AUSTRALIA.	OTHER LOCALITIES.
	SAVAI.	UPOLU.	TUTUILA.	MANUA.							
1. <i>Olethrius insularis</i> Fairm.	×	×				×	×				
2. " <i>subnitidus</i> Auriv.											
3. <i>Ceresium maculaticolle</i> Blanch.	×	×	×	×							
4. " <i>unicolor</i> F.	×	×	×	×							
5. " <i>reticulatum</i> Auriv.		×	×	×							
6. <i>Obrium gynandropsidis</i> Fairm.		×	×	×		×					
7. <i>Glauctes aureosignata</i> Auriv.		×									
8. <i>Dihammus acanthias</i> Pase.	×	×						?			
9. " <i>holotephrus</i> Boisd.		×	×	×							
10. " <i>rusticator</i> F.		×	×	×							
11. <i>Pterolophia lateripicta</i> Fairm.		×				×					
11A. " " " <i>var. connexa</i> Auriv.			×								
12. <i>Ropica</i> , sp.		×									
13. <i>Ropica</i> , sp.		×									
14. <i>Prosoplus samoanus</i> Auriv.		×									
15. " <i>ventralis</i> Auriv.		×		×							
16. " sp.		×		×							
17. <i>Lamprosbyra sulcata</i> Auriv.	×	×									

	SAMOA ISLANDS.					TONGA.	F.J.I.	TAHITI.	NEW HEBRIDES.	AUSTRALIA.	OTHER LOCALITIES.
	SAVII.	UPOLU.	TUTUILA.	MANUA.							
17A. <i>Lamprosybra sulcata</i> var. <i>fuscipennis</i> Auriv. .			×								
18. <i>Oopsis semigranosa</i> Fairm. . . .		×	×				×	×			
19. " <i>nutator</i> F. . . .		×	×				×	×			
20. " <i>albopicta</i> Auriv. . . .		×	×	×				×			
21. " <i>striatella</i> Fairm. (?) . . .		×									Oceanic Is.
22. " <i>oblongipennis</i> Fairm. (?) . . .		×	×	×			×				
23. " sp.				×							
24. " <i>obtusipennis</i> Auriv. . . .			×								
25. <i>Paratrypanius flavovittatus</i> Auriv. .		×									
26. " <i>savaiensis</i> Auriv. .	×										
27. " <i>bipunctatus</i> Auriv. .		×									
28. <i>Sciadella albofasciata</i> Auriv. . .		×									
29. " <i>variabilis</i> Auriv. . .		×	×								
29A. " " <i>ab. bilineata</i> Auriv. .		×	×								
29B. " " <i>ab. trigonifera</i> Auriv. .		×									
30. " <i>minuta</i> Auriv. . .				×							
31. <i>Odontorhabdus dentipes</i> Auriv. .		×	×	×							
32. " <i>Rechingeri</i> Auriv. .	×	×									
33. " <i>flavicornis</i> Auriv. .		×									
34. " <i>teretiscapus</i> Auriv. .		×									
35. <i>Leptocyrtinus nitidus</i> Auriv. . .		×									
Totals	7	31	20	2							

From this synopsis it is seen, that at present thirty-five species of Cerambycids are known to occur on the Samoan Is., of which seven have been found on Savaii, thirty-one on Upolu, twenty on Tutuila and only two on Manua.

Four genera, *Lamprosybra*, *Paratrypanius*, *Odontorhabdus*, *Leptocyrtinus* (with one species), and perhaps also *Sciadella* (three species) are known only from Samoa. Moreover, twenty-three species are not met with in other countries.

Each of the Samoan islands seems to possess endemic forms. *Paratrypanius savaiensis* is known only from Savaii; *Glaucytes aureosignata*, *Prosoplus samoanus*, *Paratrypanius flavovittatus* and *bipunctatus*, *Sciadella albofasciata*, *Odontorhabdus flavicornis*, *O. teretiscapus* and *Leptocyrtinus nitidus* only from

Upolu ; peculiar to Tutuila are *Olethrius subnitidus*, *Prosoplus ventralis*, *Oopsis obtusipennis* and *Sciadella minuta*.

It seems evident that Savaii, the largest island in the group, has been less well explored than Upolu or Tutuila. [This is certainly the case.—P. A. BUXTON.]

The species of CERAMBYCIDAE known from Samoa are as follows :—

PRIONINAE.

1. *Olethrius insularis* Fairm.

Mallodon insularis Fairmaire, *Rev. Zool.* (2), 2, p. 57, (2) 1, t. 11, f. 14, 1850 ; *Olethrius insularis* Lameere, *Ann. Soc. Ent. Belg.*, 47, p. 133, 1903 ; *Révis. Prion.*, p. 175, 1903 ; *Olethrius insularis* Auriv., *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Kl.*, 89, p. 691, 1913.

Upolu : two females, Apia, viii. and 21.x.1924 ; two other females, Malololelei, 2000 ft., iv.1924, 17.iv.1925.

The third joint of the antennae is not or hardly twice as long as the second, and has on the under side near the apex a distinct and well defined sensory surface composed of two or three shallow, dull furrows ; first joint more or less curved on the inner side. Elytra dull, not glossy, densely vermiculate and rugulose, especially before the middle.

2. *Olethrius subnitidus*, sp. n.

♂, Nigro- vel castaneo-brunneus. Caput paulo latius quam longius, supra fortiter rugulosum, grosse punctulatum, inter oculos depresso et longitudinaliter sulcatum. Antennae ultra elytrorum medium attingentes, articulo 1° recto, obconico, supra longitudinaliter sulcato, punctato, punctis lateraliter confertioribus, articulo 3° nitido, parce punctato, secundo duplo longiori, area sensili indistincta, articulis duobus ultimis per longitudinalinem totam striatis. Prothorax transversus, basi elytrorum latitudinem aequans, antrorum angustatus, lateribus fere rectis, denticulatis, angulis posticis paulo productis, disco ad latera fortiter ruguloso, medio nitido, punctato, tumoribus duobus parce punctatis instructo. Scutellum magnum, late rotundatum, pilis brevibus recumbentibus omnino vestitum. Elytra nuda, nitidiuscula, coriacea, punctis nonnullis parvis, apicibus late rotundatis, angulo suturali acuto, costis vix perspicuis. Pedum anticorum femora et tibiae scabra, fortiter punctata et rugosa, nec denticulata nec spinosa. Metasterni latera et

episterna pilis flavidis vestita. Abdomen subitus nudum, nitidum, segmento ventrali ultimo postice fulvo-villoso, medio leviter sinuato.

Long. corporis 58–66 mm. ; lat. 21–24 mm.

♀ Antennae ultra elytrorum medium haud attingentes, articulis 6°–11° striatis, articulo 11° paulo compresso. Pronotum minus punctatum, angulis posticis magis productis. Pedes nitidi, parce punctati, antici haud scabri.

Long. 62 mm. ; lat. 20. mm.

Three males and one female, Tutuila (Kellers).

Nearly allied to the preceding species (*O. insularis* Fairm.), but differing in having coriaceous subnitid elytra, a longer, straight or nearly straight first antennal joint, and a longer third joint, which is about twice as long as the second joint and has its sensory surface obsolete. From *O. tyrannus* Thoms., the present species is easily distinguished by the shorter and stouter third joint of the antennae. In *O. tyrannus*, the third joint is three times as long as the second joint.

CERAMBYCINAE.

3. *Ceresium maculaticolle* Blanch.

Diatomocephalus maculaticollis Blanchard, *Voy. Pôle Sud*, 4, p. 267, t. 16, fig. 9, 1853.

Ceresium maculaticolle Auriv., *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Klasse*, 89, p. 691, 1913.

Two males and twenty-one females, Upolu: Apia, 23.i.1924, v.1924, vii.1924 and i.1925; Malololelei, 2000 ft., 24, 25.ii.1924, 22.iv.1925; Apia, 20.viii.1922, 10.x.1922, 13.iv.1924 (Armstrong); same locality, 13.ix.1923 (Swezey and Wilder). Two females, Pago Pago, Tutuila (Kellers and Steffany).

The species was also found in Tonga at Manau and Nukualafa, ii., iii.1925, by G. H. E. Hopkins.

4. *Ceresium unicolor* F.

Saperda unicolor Fabricius, *Mant. Ins.*, 1, p. 147, 1787; *Saperda unicolor* Oliv., *Ent.*, iv, 68, p. 38, t. 3, fig. 28, 1795; *Saperda unicolor* Boisd., *Voy. Astrol. Ent.*, 2, p. 526, 1835; *Hesperophanes guttaticollis* Fairm., *Rev. Zool.* (2), 2, p. 63, 1850; *Ceresium unicolor* Bates, *Ann. Mag. Nat. Hist.* (4), 14, p. 131, 1874; *Ceresium simplex* var. Fairm., *Ann. Soc. Ent. Fr.* (6), 1, p. 472, 1887; *Ceresium unicolor* Auriv., *Denkschr. K. Akad. Wiss. Wien, Math. Naturw. Klasse*, 89, p. 691, 1913.

Upolu: ten specimens, Apia, iii., v., vi.1924 (Buxton and Hopkins), 10.iv.1923 (Armstrong), 13.ix.1923 (Swezey and Wilder); one specimen, Lalo-manu, xi.1924; also one specimen, Tutuila, 9.ix.1923 (Swezey and Wilder).

The species is widely distributed over the islands of the Pacific Ocean, but is replaced in New Guinea, the Philippine Is., the Malay Archipelago, Southern Asia, Madagascar, Mauritius and East Africa by the nearly allied *C. simplex* F.

5. *Ceresium reticulatum*, sp. n. (Plate I, fig. 1).

Elongatum, subparallelum, parum convexum, rufobrunneum, clava femorum, capite pronotoque interdum infuscatis, tenuiter griseo-pubescentis aut ex parte subnudum, tarsis supra densius griseis. Caput et pronotum supra dense reticulato-punctata aut striolata. Caput cum oculis pronoto vix angustius. Prothorax latitudine media haud vel parum longior, supra parum convexus, in lateribus pone apicem et in medio plus minusve tumidus. Scutellum rotundatum. Elytra subnitida, discrete punctata punctis apicem versus multo minoribus, pilis adpressis, brevibus, griseis vestita, apice singulatim rotundata. Corpus infra punctulatum, ante coxas anticas reticulatum. Femora modice clavata, postica apicem abdominis haud attingentia. Antennae corpore parum longiores, apicem versus pallidiores, flavidio-pubescentes.

Long. corporis 7-8 mm.

Two specimens, Upolu: Apia, 18.iv.1925 (Buxton and Hopkins); Malololelei, 13.ix.1923 (Swezey and Wilder). Three specimens, Tutuila: Pago Pago, 30.ix.1923 (Steffany); 1200 ft., 21.vii.1918 (Kellers).

The specimens from Tutuila have a somewhat narrower and more finely sculptured prothorax

Allied to *C. olidum* Fairm., but differing from that and other known species in the sculpture of the prothorax.

6. *Obrium gynandropsidis* Fairm.

Obrium gynandropsidis Fairmaire, *Rev. Zool.* (2), 2, p. 59, 1850; *Rev. Zool.* (2), 1, tab. 11, fig. 4, 1849; *Obrium gynandropsidis* Auriv., *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Klasse*, 89, p. 691, 1913.

Two males and two females, Upolu: Apia, i.1925, Malololelei, 2000 ft., 14-30.vi.1924. Two males, Tutuila: Pago Pago, 24.ix.1923 (Swezey and Wilder).

Also one male, Tonga: Vavau, Neiafu, 5.viii.1925 (G. H. E. Hopkins).

The type of this species was obtained in Tahiti. Specimens from that island are paler, with the sides of the pronotum only slightly darkened in the

middle, and the club of the femora light brownish. Specimens from the Samoan Is. are darker, with the club of the posterior femora blackish, the antennae distinctly ringed with brown, and the pronotum on each side with a broad blackish stripe; the stripes are usually united with each other at the base and apex.

7. *Glaucytes aureosignata*, sp. n.

Nigra, haud vel vix aenescens, elytris ad basin plus minusve brunnescens; femoribus ad basin rufis. Corpus supra signaturis aureo-tomentosis ornatum, infra dense griseo-pubescentis medio metasterni abdominisque nudis. Caput supra aureotomentosum, in vertice macula nuda nitida triangula ornatum, genis temporibusque griseo-albidis, pilosulis. Pronotum aureo-quadrivittatum vittisque tribus nitidis nudis nigris parce et remote punctulatis ornatum, leviter conicum lateribus subrectis angulis posticis leviter incurvis. Scutellum nigrum utrinque griseo-pubescentis. Elytra subtrigona, apicem versus angustata, apice oblique truncata angulis dentatis, suturalibus retrorsum magis productis, subseriatim discrete punctata intersticiis laevibus, nitidis, ad basin et circa scutellum flavescente tomentosa, deinde vitta lata impressa suturali maculisque tribus magnis impressis seriatis aureo-tomentosis, insuper pone humerum macula simili laterali haud impressa ornata. Episterna metathoracis omnino pube densa aureo-mutante vestita.

Long. corporis 11–13 mm.

♂, Antennae corpore multo longiores; articulus ultimus elongatus, paenultimo longior, apice curvatus. Femora postica apicem elytrorum superantia.

♀, Antennae corpore vix longiores; articulus ultimus parum elongatus, paenultimo haud longior, rectus. Femora postica apicem elytrorum haud superantia.

Three males and five females, Malololelei, Upolu, 2000 ft., 5.i., 18.iv.1924; one specimen, Apia, iv.1924.

Nearly allied to *Glaucytes graphica* Boisd., and perhaps only a local race of that species. Easily distinguished by the colour of the tomentum and probably also by the sculpture.

No species of the Genus *Glaucytes* was hitherto known to occur in the Samoan Is.

LAMIINAE.

8. *Dihammus acanthias* Pasc.

Monochamus acanthias Pascoe, *Ann. Nat. Hist.* (4), 15, p. 65, 1875; *Haplohammus acanthias* Auriv., *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Kl.*, 89, p. 691, 1913.

Eleven males and five females from the coast-districts of Savaii and Upolu. Savaii: Fagamalo and Iuasivi, xi.1925 (Buxton and Hopkins); Salailua, 21.v.1924 (Bryan). Upolu Is.: Apia, 18.ii., 30.vi.1922, 19.iv., 18.v.1924 (Armstrong); 13.ix.1923 (Swezey and Wilder); vi., vii., xii.1924; Vailutai, Lalomanu and Aleipata, 10.iv., 9.vi., xi.1924.

My surmise (*l.c.*, 1913) that this species has been introduced into the Samoan Is. in recent times is corroborated by the localities mentioned above.

9. *Dihammus holotephrus* Boisd. (?)

Lamia holotephra Boisduval, *Voy. Astrol. Ins.*, 2, p. 498, t. 8, fig. 3, 1835; *Haplohammus holotephrus* Auriv., *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Kl.*, 89, p. 692, 1913.

Eight males and eighteen females, from Upolu and Tutuila. Upolu: Apia, i.-vii.1924; Malololelei, 2000 ft., 14-30.vi., 28.xi.1924; Aleipata, xi.1924. Tutuila: Pago Pago, 20.ix., 18.xii. 1923; Amauli, 5.ix.1923; Fagataga, 29.iii.1926 (various collectors).

As to the interpretation of Boisduval's species, see my paper quoted above.

10. *Dihammus rusticator* F.

Lamia rusticator Fabricius, *Syst. Eleuth.*, 2, p. 294, 1801; *Monohammus rusticator* Blanch., *Voy. Pôle Sud Zool.*, 4, p. 294, t. 17, fig. 5, 1853; *Monochamus rusticator* Aulm., *Fauna deutsch. Kolon.*, 5, 3, p. 19, fig. 14, 1912; 5, 5, p. 20, fig. 16, 1913; *Lamia fistulator* Germ., *Ins. Spec. Nov.*, p. 478, 1824; *Monochamus fistulator* Pasc., *Trans. Ent. Soc. Lond.* (3), 3, p. 293, 1866.

One male, one female from Upolu: Apia, xi.1925; Lalomanu, xi.1924. One male from Tutuila: Pago Pago, 4.xi.1925, one ♂.

This widely distributed species, not hitherto known from the Samoan Is., is probably a recent introduction.

11. *Pterolophia lateripicta* Fairm.

Oopsis lateripictus Fairmaire, *Pet. Nouv. Ent.*, 2, p. 290, 1879; *Ann. Soc. Ent. Fr.*, (6) 1, p. 479, 1881.

Three specimens from Upolu: Lalomanu, xi.1924. Two specimens from Tonga: Neiafu, Vavau, 5, 7.iii.1925.

Var. *connexa*, var. n.

A forma typica differt plagis lateralibus fuscis elytrorum intus dilatatis ad suturam connexis.

Long. corporis 7 mm.

One specimen from Tutuila: Leone, 24.iii.1926 (Judd).

12. *Ropica*, sp.

A single specimen from Upolu: Malololelei, 2000 ft., 25.ii.1924.

The incision on the outer side of the middle tibiae is hardly perceptible.

13. *Ropica*, sp.

One specimen, also from Upolu: Malololelei, 14–30.vi.1924.

Darker and differently coloured, if compared with No. 12, but perhaps the same species. I have not thought it advisable to describe these unique specimens.

14. *Prosoplus samoanus* Auriv.

Prosoplus samoanus Aurivillius, *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Kl.*, 89, p. 692, 1913.

Ten males and five females from Upolu: Apia, 16.ii., 25.vi.1922 (Armstrong); 9.ii., 3, 28.iii., vi., vii., x., xii.1924 (Buxton and Hopkins); Malololelei, 2000 ft., 22.vi.1924 (Armstrong), vii.1924; Aleipata, 10.vi.1924 (Buxton and Hopkins); Leulumoega 14.ix.1923 (Swezey and Wilder); Lalomanu, xi.1924.

Only known from Upolu, where it is evidently common.

15. *Prosoplus ventralis*, sp. n.

Subcylindricus (♀) aut postice angustior (♂), piceus aut nigricans, pilositate adpressa flavescente aut obsolete virescente plus minusve densa vestitus maculisque perpaucis flavidis conspersus, sub vestimento nitidiuseulus. Antennae unicolores, nec punctatae nec annulatae, infra ciliatae, corpore parum (♂) vel vix (♀) longiores. Palpi rufobrunnei. Labrum et clypeus apice ciliis flavis instructa. Frons transversa, punctata, minus dense griseo-pubescent. Genae lobis inferioribus oculorum subaequales. Caput supra inter antennas latissime sulcatum sulco postice angustato, triangulo. Prothorax transversus, utrinque prope apicem dente valido armatus, ante dentem constrictus, unicolor, flavescent, remote punctatus, ad basin leviter bisulcatus, in medio linea angusta nitida, interdum obsoleta aut interrupta instructus. Scutellum semicirculare, flavid-pilosum. Elytra ad basin pronoto latiora humeris obtuse rotundatis, apice late et obtuse rotundata, ad basin fortius subgranulatim punctata punctis apicem versus sensim minoribus, pube virescente-flavida maculisque paucis flavescentibus seriatis vestita, pube flava in medio fasciam latissimam transversam, latera versus dilatatam, male definitam aut obsoletam formante. Pedes griseo-pubescentes. Latera pectoris (saepe) maculaeque magnae transversae laterales segmentorum 1-4 abdominis dense aurantiaco-tomentosa.

Long. corporis 9-14 mm.

♂, Antennae apicem elytrorum articulo 8° attingentes. Pedes antici validiores femoribus incrassatis coxisque spina armatis. Segmentum ultimum ventrale subplanum, haud lineatum.

♀, Antennae corpore haud vel parum longiores. Femora antica minus incrassata coxis inermibus. Segmentum ultimum ventrale leviter convexum linea media impressum.

Three males and four females, all from Tutuila : Pago Pago, 20-27.ix.1923 ; Afono, 25.ix.1923 ; Amauli, 5.ix.1923 (Swezey and Wilders) ; 760-900 ft., 18.iv., 18.xii. (Kellers).

Easily distinguished from other known species by the large, orange-yellow, well defined spots on the abdomen.

16. *Prosoplus*, sp.?

Three males from Upolu: Apia, x.1924; Malololelei, 2000 ft., 24.ii., 14-30.vi.1924.

I have not been able to decide whether these specimens belong to an already known species of the very difficult genus *Prosoplus* or not.

Lamprosybra, gen. nov.

(*Ptericoptinorum.*)

Caput subretractile, inter antennas et oculos sat profunde sulcatum; frons subquadrata aut supra paullulo angustata; genae mediocres lobis inferioribus oculorum breviores. Oculi rude granulati, supra subapproximati lobis inferioribus magnis fere quadratis. Antennae corpore sesqui (♂) vel parum (♀) longiores; scapus brevis obovatus; articuli 3 et 4 elongati, aequi longi, reliqui breviores. Prothorax subtransversus, apicem versus leviter angustatus, lateribus parum arcuatis subrectis, ad basin apicemque sulco transverso tenui instructus. Scutellum apice rotundatum. Elytra subcylindrica, apice singulatim rotundata, nuda, nitida, basi apiceque exceptis profunde punctato-striata. Pedes mediocres; femora crassa, postica apicem segmenti 4i abdominis attingentia aut superantia. Corpus supra fere nudum, nitidum, infra cum pedibus tenuissime pubescens.

Nearly allied to the genera *Sybra* and *Myronoma*, differing from the former in having longer hind femora, from the latter in having the prothorax shorter and not cylindrical, and from both owing to the glossy and nearly glabrous elytra.

17. *Lamprosybra sulcata*, sp. n.

Nigro-fusca, supra fere nuda, infra cum pedibus tenuissime griseo-pubescent; elytra viridiaenea, nitida. Frons subnitida, remote punctulata; vertex sublaevis punctis perpaucis impressus. Antennae fusco-brunneae, infra breviter ciliatae, opacae, scapo obscuriore, articulis 5-11 ad basin griseo-annulatis. Prothorax supra inaequalis, irregulariter punctatus, utrinque linea albido-tomentosa ornatus. Scutellum obtuse rotundatum apice pallide pubescens. Elytra ad basin pronoto tertia parte latiora, apice rotundata;

nitida, fere nuda, ad basin irregulariter punctata, apice laevia haud punctata, inter basin et apicem profunde punctato-striata interstitiis laevibus nitidis, pone medium guttis 9-10 albo- vel flavid-tomentosis serie transversa sub-duplice ordinatis ornata, interdum etiam guttis 1-2 ante medium instructa. Pectus utrinque rude punctatum. Abdomen laeve, nitidum. Tarsi supra dense albido-pubescentes.

Long. corporis 11-14 mm.

Three males from Upolu : Malololelei, 2000 ft., 24.ii., 22.iii.1924, 21.iv.1925 (Buxton and Hopkins); one female from Savaii: Safune, in the rain forest, 2000-4000 ft., 2.v.1924 (Bryan).

Var. *fuscipennis*, var. n.

A forma typica differt elytris fuscis (haud aenescensibus) guttis tomentosis minoribus et paucioribus statuaque paullo minore.

Five males from Tutuila : two in the centre of the island, 900-1200 ft., vi. xii.1918 (Kellers); one, Pago Pago, 22.ix.1923 (Swezey and Wilder).

This species is undoubtedly endemic on the Samoan Is.

18. *Oopsis semigranosa* Fairm.

Oopsis semigranosa Fairmaire, *Pet. Nouv. Ent.*, 2, p. 289, 1879; *Ann. Soc. Ent. Fr.* (6), 1, p. 475, 1881.

Two males, one female. Upolu : Apia, 1.xi.1925 (Buxton and Hopkins). Tutuila : Amauli, 9.vi.23 (Swezey and Wilder).

19. *Oopsis nutator* F.

Lamia nutator Fabricius, *Mant. Ins.*, 1, p. 142, 1787; *Lamia nutator* Oliv., *Ent.*, 7, 67, p. 118, t. 14, fig. 102, 1792; *Oopsis nutator* Fairm., *Rev. Zool.* (2), 2, p. 116, 1850; *Oopsis nutator* Lacord., *Gen. Col.*, 9, p. 619, t. 104, fig. 2, 1872; *Oopsis nutator* Auriv., *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Kl.*, 89, p. 693, 1913.

Ten specimens. Upolu : Apia, 2, 8, 31.iii.1924 (Armstrong); Apia, iii.-v.1924, xi.1925; Malololelei, 25.ii.1924; Lalomanu xi.1924 (Buxton and Hopkins). Tutuila : Pago Pago, 6.24.ix.1923 (Swezey and Wilder), iv.1918 (Kellers); Amauli, 6.ix.1923 (Swezey and Wilder).

A widely distributed, but somewhat variable species.

20. *Oopsis albopicta*, sp. n.

Ab *O. nutatore* F., cui proxime affinis differt statura minore, pubes grisea multo tenuiore; capite, lateribus pectoris, vittis pronoti (antice saepe abbreviatis) guttisque elytrorum (saepissime elongatis) albo-tomentosis.

Long. corporis 6-7 mm.

Ten specimens. Upolu: Apia, iii., vi.1924, ii.1925; Malololelei, 14-30.vi.1924; Lalomanu, xi.1924 (Buxton and Hopkins). Tutuila: Pago Pago, 24.ix.1923; Amauli, 6.ix.1923 (Swezey and Wilder). Manua Is.: Tau, 20.ii.1926 (Judd).

This form is probably the same as that which Fairmaire (*Ann. Soc. Ent. Fr.* (6), 1, p. 478, 1881) regards as a variety of *O. nutator*, or (*Revue Zool.* (2), 2, p. 117, 1850, as its male. Further investigations in the field are necessary to decide the matter.

O. albopicta is somewhat intermediate between *O. nutator* and *O. brunneocaudata* Fairm.

21. *Oopsis striatella* Fairm. (?).

Oopsis striatellus Fairmaire, *Pet. Nouv. Ent.*, 2, p. 289, 1879; *Ann. Soc. Ent. Fr.* (6), 1, p. 477, 1881.

Two specimens, Upolu: Aleipata, 10.iv.1924.

Also one specimen, Tonga: Vavau, 9.iii.1925.

The examples before me appear to agree well with Fairmaire's descriptions.

22. *Oopsis oblongipennis* Fairm. (?).

Oopsis oblongipennis Fairmaire, *Rev. Zool.* (2), 2, p. 118, 1850.

Nine specimens, Upolu: Apia, 24.i.1924; Malololelei, 2000 ft., 25.ii.1924 (Buxton and Hopkins). Tutuila: Amauli, 5-6.ix.1923 (Swezey and Wilder), xii.1918 (Kellers). Manua: Tau, 20.ii.1926 (Judd).

Also two specimens, Tonga: Vavau.

Individuals with the apex of the elytra obliquely truncate, and the outer angle of the truncature somewhat produced have been referred to the present species, and specimens with transversely truncate apex of the elytra to *O. striatella*. All other distinctions between the two species seem to be variable.

23. *Oopsis*, sp. ?

A single specimen from Tutuila, Pago Pago, 20.ix.1923 (Swezey and Wilder), is much smaller (6 mm.) and more uniformly variegated with grey. Probably, however, it is only a small example of *O. oblongipennis*.

24. *Oopsis obtusipennis*, sp. n.

Elongata, subcylindrica, obscure fusca aut fusco-brunnea, parce griseo-pubescent, pone medium elytrorum maculis parvis elongatis 4-5, transversim seriatis, lineaque utrinque pronoti antice abbreviata flavidis ornata. Frons subnitida minute punctulata. Antennae brunneae apicem versus pallidiores, flavescentes, et obsolete griseo-annulatae; maris corpore longiores. Prothorax subquadratus, supra remote, inaequaliter, rude punctatus. Scutellum rotundatum. Elytra fere cylindrica, apice singulatim rotundata (omnino non truncata) punctato-striata, striis nec basin nec apicem attingentibus, ad basin irregulariter punctata haud granulata, ante apicem fere laevia, interstitiis striarum laevibus costulatis. Latera metasterni profunde punctata. Abdomen laeve nitidiusculum. Tarsi supra albido-sericei.

Long. corporis 6-8 mm.

Two males, one female, Tutuila: Pago Pago, ii.1924 (Bryan); 1000-1200 ft., xii.1918 (Kellers).

Distinguished by the cylindrical elytra with completely rounded apex, and the finely punctured forehead.

Paratrypanius Auriv.

Deutsche Entomol. Zeitschr., Jahrg., 1908, p. 223, 1908.

In the new species described below, the spine on the prothorax is nearly median as in *Acanista* Pasc. and *Lagochirus* Er. From both, *Paratrypanius* differs in having the prosternum much narrower between the coxae. The genus is evidently endemic, and the species are found only at higher altitudes in the virgin forests.

25. *Paratrypanius flavovittatus* Auriv.

Paratrypanius flavovittatus Aurivillius, *Deutsche Entomol. Zeitschr.*, Jahrg., 1908, p. 223, fig. 12, 1908.

Upolu: Apia.

Described and figured from a single specimen in the Deutsches Entomologisches Nationalmuseum in Berlin; not found by recent collectors.

26. *Paratrypanius savaiiensis*, sp. n. (Plate I, fig. 2).

Nigro-fuscus, pube obscure cinerascente variegatus, infra fere unicolor nigricans setis paucis minutis pallidis conspersus. Antennae pedesque brunneae; illae ad basin (art. 1-3) cinereo-maculatae, in medio (art. 4-7, basi apiceque) pallide annulatae. Frons subquadrata brunneo- et cinereo-variegata. Oculi ut in *P. flavovittato* supra modice distantes; lobi inferiores paullo longiores quam latiores, genis plus duplo longiores. Frons inter antennas leviter depressa, haud sulcata, tenuissime lineata. Prothorax transversus, utrinque prope medium tuberculo triangulo obtuso armatus, nigricans leviter cinereo-mutans, obsolete tuberculatus, ante medium impunctatus, ad basin serie irregulari transversa punctorum instructus. Scutellum magnum, apice rotundatum, unicolor, nigrum. Elytra ad basin truncata, humeris rotundatis, apice conjunctim late rotundata, maculis parvis discretis vel confluentibus nigro-velutinis variegata, maculisque 5-6 flavidis (una utrinque ad scutellum, singulisque laterali pone humerum, discali paullo pone medium, lateralibus et discalibus prope apicem) ornata, obsolete costulata. Femora et tibiae griseo-variegata. Tarsi supra albido-sericei, articulus basalis posticorum 2° et 3° simul sumtis parum longior.

Long. corporis 14 mm.

A single male (?), Savaii: Safune, between 2000 and 4000 ft. in the rain forest (Bryan).

27. *Paratrypanius bipunctatus*, sp. n. (Plate I, fig. 3).

Fuscus, fere undique dense irregulariter punctatus, tomento flavo-griseo vestitus. Caput haud punctatum, inter antennas et oculos anguste sulcatum. Oculi supra approximati flavocincti; lobi inferiores subquadrati, genis vix vel parum longiores. Prothorax transversus, utrinque prope medium spina laterali longa armatus, dense irregulariter punctatus, pube grisea vestitus, utrinque ad et pone spinam plaga dense flavo-tomentosa ornatus; pronotum 5-tuberculatum. Scutellum magnum, impunctatum, apice subtruncatum, ad basin saepe flavidio-pubescent. Elytra ad basin recte truncata humeris parum rotundatis, apicem versus fortiter angustata, apice angusto singulatim subtruncata aut obtuse rotundata, usque ad apicem punctata et granulata, paullo pone medium puncto discali nigro et saepe etiam maculis basalibus vel

lateralibus flavidis ornata. Pectus et latera abdominis flavo-variegata. Pedes griseo-pubescentes et fusco-maculati.

Long. corporis 15-18 mm.

Three males, Upolu : Malololelei, 2000 ft., 25.iv.1924, vi.1924.

A very peculiar and distinct species. The antennae of the male are more than twice as long as the body.

28. *Sciadella albofasciata* Auriv.

Sciadella albofasciata Aurivillius, *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Kl.*, 89, p. 693, 1913.

One male and one female, Upolu : Malololelei, 2000 ft., 24.vi.1924 (Armstrong), 17.iv.1925 (Buxton and Hopkins).

29. *Sciadella variabilis* Auriv.

Sciadella variabilis Aurivillius, *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Kl.*, 89, p. 693, 1913.

Prothorax utrinque sub tuberculo vitta lata laterali, dense et discrete punctulata, fusca aut nigricante praeditus. Elytra feminarum saepissime sub humeris vitta nigra sublaterali, medium elytrorum haud vel vix attingente ornata.

♂, Femora postica magis incrassata, apicem abdominis attingentia vel superantia. Segmentum ventrale ultimum planum.

♀, Femora postica graciliora, apicem abdominis haud attingentia. Segmentum ventrale ultimum crassius, apice foveatum.

Eleven males and twelve females. Upolu : Leulumoega, 14.ix.1923 ; Apia, 15.ix.1923, ii.1924, 2.iii.1924, iv.1924, xii.1924, 29.iv.1925, vi.1925 ; Malololelei, 2000 ft., 20, 24.vi.1924, 24.ii.1924, 14-30.vi.1924, 17.iv.1925, 13.vii.26. Tutuila : 760-900 ft., iv.1918, 21.vii.1918 ; Pago Pago 9, 25.ix.1923 (various collectors).

Ab. ♀, *bilineata*, ab. n. Elytra pone medium lineis binis obliquis nigris, ad suturam plus minusve connexis ornata.

Six specimens, Upolu : Malololelei, 30.vi., 2.vii.1924 (Armstrong) ; vi.1924 (Buxton and Hopkins) ; vii.1925 (Wilders). Tutuila : 1070 ft., 21.vi.1918 (Kellers).

Ab. ♀, *trigonifera*, ab. n.

Elytra utrinque prope medium plaga laterali triangula nigra, bene definita, vittaque sublateralis nigra cum humero connexa ornata.

This form is already mentioned in my paper on the Samoa Cerambycids referred to above.

Upolu : Malololelei, 2.vii.1924 (Armstrong). One specimen only.

30. *Sciadella minuta*, sp. n. (Plate I, fig. 4).

Pallide brunnea, supra pube cana maculisque denudatis fuscis plus minusve variegata, infra immaculata. Frons transversa, inter antennas depressa. Vertex inter oculos vix impressus. Antennae flavescentes, articulo sexto apicem elytrorum attingente; scapus unicolor, spinam pronoti haud vel vix attingens, articulo 3° brevior; articuli 3^{us} et 4^{us} aequi longi, 6-11 ad basin anguste et obsolete albido-annulati. Prothorax latitudine basali fere longior, pone medium spina parva laterali armatus, lateribus inter spinam et apicem rectis, supra leviter convexus, ad medium marginis apicalis tumidiusculus, dense punctulatus, cano-pubescentis vittis duabus abbreviatis discalibus brunneis saepe ornatus, lateraliter sub spinam infuscatus. Scutellum rotundatum, albido-pubescentis. Elytra leviter convexa, subcylindrica, apice singulatim rotundata, prope basin tuberculo obtuso elongato discali instructa, subseriatim punctata, ante medium leviter transversaliter depressa, maculis brunneis variegata, in parte apicali saepe distinctius cano-pubescentia. Pedes flavescentes, vix fusco-variegati, haud vel parum albo-pilosus; femora anteriora saepe in medio infuscata. Articulus basalis tarsorum posticorum 2° et 3° simul sumtis brevior.

Long. corporis 4.5-5 mm.

♂, ignotus.

♀, Femora postica apicem segmenti 4 ventralis haud superantia. Segmentum ventrale ultimum apice foveatum.

Three females, Tutuila : in the centre and at the eastern end, 1070-1200 ft., 21.vi.1918 (Kellers); Pago Pago, 10.ix.1923 (Swezey and Wilder).

This small species is easily distinguished from its congeners by the body being more convex and cylindrical, the pronotum somewhat longer, the antennae paler and the hairs on the legs and the sides of the elytra scanty. The humeral carina of the elytra is very slightly developed.

Odontorhabdus Auriv.

In the females the subbasal spine of the first antennal joint is absent or vestigial, and the hind femora do not reach the apex of the elytra.

31. *Odontorhabdus dentipes*, sp. n. (Plate I, fig. 5).

♂, Punctatus, nitidiusculus, brunneus ; scapo, medio prothoracis clavisque femorum plus minusve infuscatis. Oculi superiores ab antennis longe remoti, tumidi. Antennae corpore longiores, brunneae ; scapus articulo 3° parum longior, antice dentibus 2-3, postice prope basin spina parva armatus. Prothorax basin apicemque versus angustatus lateribus in medio valde rotundatis, latitudine basali parum longior, punctatus, basin versus striolatus, vitta media laeviuscula praeditus. Scutellum nitidum, nigrum. Elytra ad basin truncata humeris obtusis, pronoti medio parum latiora, dense irregulariter punctata, supra subplana depressione levi ante medium, apice conjunctim late rotundata sutura plagiisque 3-5 in singulo albido-setosis. Pedes brunneo-flavi ; clava femorum obscurior, crassa, brevis. Latera pectoris punctata. Abdomen nitidum ; segmentum basale remote punctatum, reliqua laevia.

Long. corporis 4-4.5 mm.

♀, Scapo antennarum inermi femoribusque posticis apicem elytrorum haud attingentibus differt.

Two males, Upolu : Malololelei, 2000 ft., viii.1924 (Buxton and Hopkins) ; Tutuila : 1200 ft., 21.vii.1918 (Kellers). One female, Tutuila : Pago Pago, 10.ix.1923 (Swezey and Wilder).

The males are easily distinguished by the denticles of the antennal scape, which are situated nearly opposite the small subbasal spine.

32. *Odontorhabdus rechingeri* Auriv.

Odontorhabdus Rechingeri Aurivillius, *Denkschr. K. Akad. Wiss. Wien, Math.-Naturw. Kl.*, 89, p. 694, 1913.

Three females : Upolu : Malololelei, 2000 ft., 25.iv., vi., 30.xi.1924.

33. *Odontorhabdus flavicornis*, sp. n. (Plate I, fig. 6).

Brunneo-fuscus, punctatus elytris antennisque pallidis. Oculi superiores haud tumidi, ab antennis brevius remoti. Antennae corpore longiores, flavae,

summo apice leviter infuscatae; scapus elongatus, leviter obconicus, sublaevis, apice infra leviter dentatus spina subbasali minuta, articulo 3° longior. Prothorax latitudine basali vix longior, in medio dilatatus lateribus rotundatis, undique dense profunde punctatus absque linea media laevi. Scutellum obtuse rotundatum, nigricans. Elytra pronoto haud latiora, ad basin truncata humeris distinctis, apice conjunctim rotundata, profunde punctata punctis apicem versus minoribus, flavo-brunnea et maculis irregularibus albido-setosulis variegata. Femora fusca, apice valde clavata. Corpus undique setulis adpressis albidis remote conspersum.

Long. corporis 3 mm.

A single specimen. Upolu: Malololelei, 2000 ft., 22.xi.1924.

34. *Odontorhabdus teretiscapus*, sp. n.

Fere undique setulis adpressis albidis remote conspersus, profunde rude punctatus, nigricans, antennis, scapo excepto, margineque apicali pronoti brunneis; elytra maculis irregularibus flavescente-pilosis ornata. Oculi superiores ab antennis remoti, margine pronoti fere obiecti. Antennae corpore paullo longiores; scapus articulo 3° longior, leviter arcuatus, fere cylindricus, ad basin ante spinam profunde constrictus, apice infra dentatus. Prothorax leviter transversus, utrinque rotundatus, subglobosus, undique rude, aequaliter punctatus. Scutellum parvum nigrum. Elytra ad basin truncata humeris distinctis, pronoti medio angustiora, apicem versus parum angustata, apice conjunctim late rotundata, dense punctata, sutura costato-elevata postice latiore. Femora valde clavata, postica apicem elytrorum superantia.

Long. corporis 3 m.

One specimen, Upolu: Malololelei, 2000 ft., vi.1924.

Perhaps only a colour aberration of *O. flavidornis*.

KEY TO THE MALES OF *ODONTORHABDUS*.

A. First joint of antennae not dentate or angulate on under side at apex. Pronotum somewhat narrower in middle than elytra at base, finely and irregularly punctured, with median line glossy and nearly smooth.

(a) Antennae, legs and prothorax with long (erect) hairs. First joint of antennae strongly obconical, nearly pyriform, unarmed on upper side. Upper eyes distinctly elongate, oblique, anteriorly approximated *O. rechingeri* Auriv.

(b) Antennae nearly naked, only very shortly ciliated on under side. Prothorax and legs only with very small, whitish setulae. First joint of antennae narrower at apex, on upper side with two blunt teeth nearly opposite subbasal spine. Upper eyes very convex, semiglobose *O. dentifer* Auriv.

B. First joint of antennae at apex on under side with a distinct tooth or prominence, nearly cylindrical or only slightly tapering between apex and subbasal spine. Pronotum in middle at least as broad as elytra at base, strongly punctured all over and without smooth median line. Eyes rather flat. Elytra with yellowish-white spots.

(a) Antennae pale yellow. Ground colour of elytra brownish-yellow *O. flavigornis* Auriv.

(b) Antennae brownish, first joint blackish. Ground colour of elytra dark brown *O. teretiscapus* Auriv.

Leptocyrtinus, gen. nov.

Corpus remote setulosum ; antennae pilosae. Caput inter antennas subplanum. Frons transversa. Oculi late divisi ; lobi superiores rotundati, ab antennis parum remoti. Antennae feminae corpore parum longiores ; scapus elongato-conicus articulo 3° longior. Pronotum elongatum, utrinque leviter rotundatum, latitudine basali multo longius. Scutellum breve, rotundatum, transversum. Elytra ad basin pronoto haud latiora humeris nullis, subcylindrica, supra plana, apice conjunctim late rotundata, subseriatim punctata. Pedes breves ; femora valde petiolato-clavata.

Allied to the genus *Cyrtillus* Auriv., of Queensland, but differing in having the third joint of the antennae much shorter than the first, and the elytra more cylindrical, neither narrowed nor declivous towards the base.

35. **Leptocyrtinus nitidus, sp. n. (Plate I, fig. 7).**

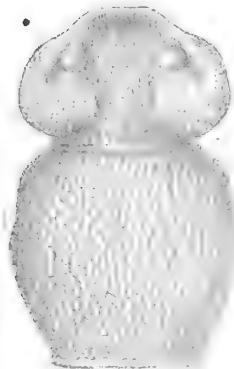
♀, Niger, nitidus, submetallicus, articulis antennarum femoribusque ad basin pallidis ; vertex nitidus sparse punctulatus linea media brevi impressus. Prothorax punctatus supra in medio transverse striolatus. Elytra supra maculis binis elongatis dense albo-pubescentibus ornata. Latera pectoris profunde punctata. Abdomen fere laeve. Pedes pallidiores ; clava femorum leviter infuscata.

Long. corporis 2 mm.

One female, Upolu : Malololelei, 2000 ft., 22.xi.1924 (Buxton and Hopkins).

EXPLANATION OF PLATE I.

FIG. 1.— <i>Ceresium reticulatum</i> , sp. n.	p. 139
,, 2.— <i>Paratrypanius savaiensis</i> , sp. n.	p. 148
,, 3.— <i>Paratrypanius bipunctatus</i> , sp. n.	p. 148
,, 4.— <i>Sciadella minuta</i> , sp. n.	p. 150
,, 5.— <i>Odontorhabdus dentipes</i> , sp. n.	p. 151
,, 6.— <i>Odontorhabdus flavigornis</i> , sp. n.	p. 151
,, 7.— <i>Leptocyrinus nitidus</i> , sp. n.	p. 153



180
b. 181
b. 182
b. 183
b. 184
b. 185
b. 186
b. 187
b. 188

FIG. 1.



PLATE I

Fig. 1. *Cassidinae* subfamilia *Atrina*. Head and prothorax

Fig. 2. *Pentatominae* subfamilia *Atrina*. The

Fig. 3. *Polyphaginae* subfamilia *Atrina*

Fig. 4. *Scutellinae* subfamilia *Atrina*

Fig. 5. *Odonatoidea* subfamilia *Atrina* ♀

Fig. 6. *Odonatoidea* subfamilia *Atrina*

Fig. 7. *Lepidoptera* subfamilia *Atrina*. The



FIG. 5

EXPLANATION OF PLATE I.

FIG. 1.— <i>Ceresium reticulatum</i> , sp. n.	p. 139
„ 2.— <i>Paratrypanius savaiensis</i> , sp. n.	p. 148
„ 3.— <i>Paratrypanius bipunctatus</i> , sp. n.	p. 148
„ 4.— <i>Sciadella minuta</i> , sp. n.	p. 150
„ 5.— <i>Odontorhabdus dentipes</i> , sp. n.	p. 151
„ 6.— <i>Odontorhabdus flavicornis</i> , sp. n.	p. 151
„ 7.— <i>Leptocyrinus nitidus</i> , sp. n.	p. 153

PLATE I.

FIG. 1. <i>Ceresium reticulatum</i> Auriv. Head and prothorax	p. 139
FIG. 2. <i>Paratrypanius savaiensis</i> Auriv. Type	p. 148
FIG. 3. <i>Paratrypanius bipunctatus</i> Auriv.	p. 148
FIG. 4. <i>Sciadella minuta</i> Auriv.	p. 150
FIG. 5. <i>Odontorhabdus dentipes</i> Auriv. ♂	p. 151
FIG. 6. <i>Odontorhabdus flavicornis</i> Auriv.	p. 151
FIG. 7. <i>Leptocyrinus nitidus</i> Auriv. Type	p. 153

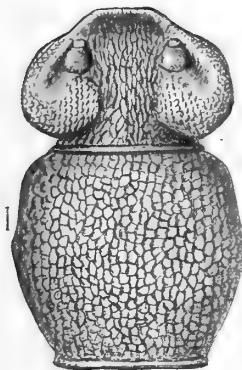


FIG. 1

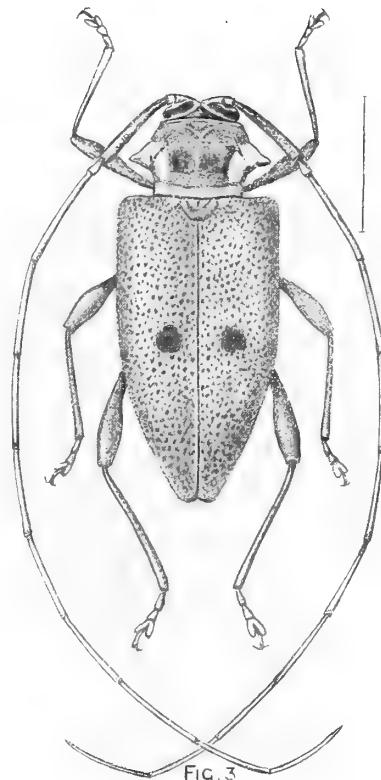


FIG. 3

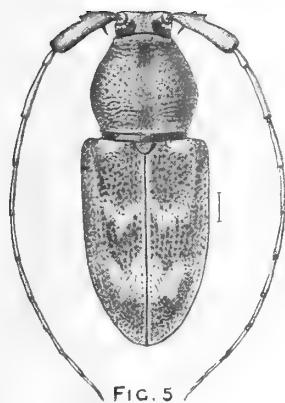


FIG. 5

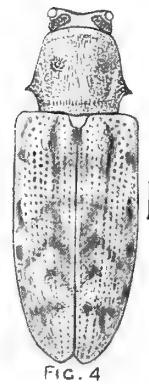


FIG. 4



FIG. 2

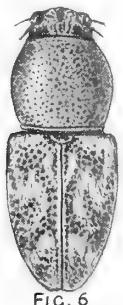


FIG. 6



FIG. 7

B R E N T H I D A E
VON R. KLEINE, STETTIN

(Mit 4 Abbildungen.)

VON den Samoa-Inseln sind bisher keine Brenthiden bekannt geworden. Man wäre geneigt anzunehmen, dass kein Vertreter der Familie soweit östlich mehr vorkäme, aber es ist noch eine Art von den Gesellschaftsinseln (Tahiti) bekannt ; bis dahin also müssten auch Brenthiden zu finden sein.

Das Auffinden von Brenthiden auf Samoa hat einen eminenten faunistischen Wert.

Die Brenthiden haben sich aus zwei Urzentren entwickelt, deren erstes das tropische Afrika, das zweite ein grosses Landmassiv umfasste, das sich von Melanesien über Neu-Guinea nach den Philippinen hinzog, und die Molukken, wenigstens zum Teil, umfasste. Bei Betrachtung des vorliegenden Materials kommt nur das äthiopische Zentrum in Frage. Von dort aus wanderte ein Teil, vermutlich über die Antarktis, nach Südamerika, dort neue Formen bildend, oder wandte sich, und das betrifft die Hauptmasse, nach Osten und ist auf seinem langen Zuge bis Tahiti vorgedrungen.*

Die äthiopischen, in die neotropische Region gewanderten Formen finden sich noch auf den Marquesas-Inseln. Es ist bisher kein Fall bekannt geworden, wo die beiden Wanderzüge sich getroffen hätten, es fragt sich also, ob beide Ausläufer irgendwo zusammentreffen. Trifft das zu, so können die Berührungs-punkte nur auf den polynesischen Inseln liegen, insofern ist jeder Fund aus dieser Gegend von Bedeutung.

Es liegen zwei Arten vor : ein *Cyphagodus* und ein *Chalybdicus*, beide gehören dem nach Osten vorgedrungenen äthiopischen Stamm an.

* The author's derivation of the Samoan Brenthidae seems to be unnecessarily complex. Both the genera would appear, from the facts given in the paper, to have spread from Malaya and Melanesia into the Central Pacific ; I suggest that this explanation of the occurrence of two species in Samoa is simple, and also consistent with what is known of the origin of the flora and fauna of Samoa.—P. A. BUXTON.

Betrachtet man nun die neuen Arten in ihrem Verhältniss zu den Gattungsgenossen, so ergibt sich folgendes Bild :

Cyphagogus. Die Gattung umfasst 40 Arten, gehört also zu den artreichen. Sie findet sich auf Ceylon, Vorder- und Hinterindien, den grossen Sunda-Inseln, Formosa, Japan, Philippinen, Celebes, Molukken, Neu-Guinea und Australien. Hier lag bis jetzt die Ostgrenze. Nun kommt die neue Art von Samoa hinzu, so dass sich das Verbreitungsareal damit weit nach Osten erweitert. Die Gattung ist sehr uniform und geht in keine andere über.

So einheitlich die Gattung auch habituell ist, so lassen sich doch zwei Gruppen unterscheiden, die durch die Ausfärbung getrennt sind. Die Hauptmasse ist einfarbig schwarz, eine kleinere Anzahl ist bunt. Es ist auffällig, dass die bunten Arten an den Randzonen auftreten, im Massiv aber garnicht oder doch nur sehr schwach. So finden sich die bunten Arten in : Australien Neu-Guinea, Philippinen, im Osten, Indien und Ceylon im Westen, dazu kommt nun die neue Art von Samoa. Die östlichen Arten sind nicht in das Massiv vorgedrungen, die westlichen finden sich, allerdings nur in Ausnahmen und ausstrahlend, auf den Sunda-Inseln.

Chalybdicus. Ausser der neuen Art ist nur eine von den Neu-Hebriden bekannt. Die Gattung ist also rein polynesisch.

Mit Ausnahme der myrmekophilen Formen, sind alle Brenthiden xylophag. Sie kommen also auch nur in Gebieten vor, in denen noch Baumbestand vorhanden ist. Biologisch sind die Holzbewohner wieder in zwei Gruppen gespalten : Xyophage und Brut- oder Raumparasiten. Zur ersten Gruppe gehört *Chalybdicus* ; sie entwickelt sich im Cambium kranker oder anbrüchiger Bäume. *Cyphagogus* dagegen ist Brutparasit bei anderen Holzkäfern, meist bei Platypodiden, die sie mit ihren starken Mandibeln aus den Bohrgängen herausziehen um daselbst ihre Eier abzulegen. Die Larven leben dann von den Wirtslarven und verpuppen sich in den Gängen, beziehungsweise Puppenwiegen der Wirtstiere. Der zylindrische Bau der *Cyphagogus*-Arten ist der Lebensweise angepasst, die kräftigen Vorderbeine können in den Prothorax eingelegt werden.

Cyphagogus Parry.*Trans. Ent. Soc. Lond.*, v, p. 182, 1849.1. *Cyphagogus samoanus*, sp. n.

Kopf und Fühler rotbraun, Hals dunkelbraun, Prothorax tief schwarzbraun, im vorderen Viertel hellbraun, Vorderrand und Kanten des Prothorax verdunkelt, Elytren hellrotbraun, mit 3 schwarzen Binden, 1. an der Basis, 2. auf der Mitte, 3. am Absturz, 2. und 3. Binde zuweilen an der Sutura und am Aussenrand verbunden, Beine rotbraun; am ganzen Körper stark glänzend. Kopf gegen den Hals nur wenig verschmälert, abgeplattet, zwischen den Augen mit zarter Vertiefung, Punktierung nur an den Augen; Unterseite mit tiefer, schmaler Gularrinne; Rüssel abgeplattet, parallel, Vorderrand flach nach innen gebuchtet, Punktierung einzeln, an den Rändern deutlicher. Fühler ohne besondere Merkmale. Prothorax robust, an der Basis zuweilen schwach gefurcht, einzeln aber deutlich punktiert, unbehaart, Conus breit, kräftig, Seitenränder mehr oder weniger rauh. Suturalrippe auf den Elytren breit, 2. kurz, schmal, nur an der Basis vorhanden, 3. breit, 4. schmal, in der Mitte fast linear, 5. gleich der 3., die seitlichen Rippen flach, gleichbreit, nur die 6. ist so breit wie die 3. und 5., alle Rippen mit kräftiger, unregelmässiger Punktierung, unbehaart. Vorder- und Mittelbeine normal, Hinterbeine und Schienen desgleichen, Metatarsus so lang wie das 2. und 3. Glied zusammen, Skulptur und Behaarung normal, Klauen walzig. Metasternum schmal gefurcht, Punktierung deutlich, 1. und 2. Abdominalsegment ungefurcht, zart punktiert, 3.-5. normal.

Länge (total, ohne Beine): 5-6 mm. Breite (Proth.) 1 mm. *circa*.

Samoa: Upolu, Apia, iii. 1924 (Buxton und Hopkins). 2 ♂♂.

Typen im Britischen Museum.

Wie bei allen bunten *Cyphagogus*-Arten, unterliegt die Ausfärbung auch bei *C. samoanus* bestimmten Schwankungen, die zum Teil in der Ausreife des Individuums begründet sind. Zur Characterisierung mussten diejenigen Belegstücke dienen, deren Ausfärbung am weitesten vorgeschritten war.

In Habitus und Ausfärbung schliesst sich *C. samoanus* den australischen Arten an. Zum Vergleich sind heranzuziehen: *C. delicatus* Lea, *C. suspendiosus*

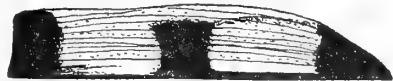


ABBILDUNG 1.—*Cyphagogus samoanus*,
sp. n., Farbenverteilung auf den
Elytren.

Lea, *C. hauseri* Kleine. Die Differenzen gegen die genannten Arten sind folgende:

(a) Gegen *C. delicatus* Lea.—

Jede Behaarung fehlt. Die Elytrenrippen sind ohne Borsten. Die Elytren haben 3 dunkle Binden. Der Prothorax ist deutlich punktiert.

(b) *C. suspendiosus* Lea.—

Der Kopf ist an der Basis nicht verschmälert. Ausserdem kommen die bei *C. delicatus* genannten Differenzen in Betracht.

(c) *C. hauseri* Kleine.—

Prothorax in der Region des Conus rotbraun, Elytren mit 3 dunklen Binden. Conus nicht rundlich, sondern scharfkantig, unbehaart. Abdomen ungefurcht.

Von allen bekannten Arten durch die Ausfärbung der Elytren sofort trennbar.

Chalybdicus Kleine.

Arch. Nat., lxxxviii, A, 3, p. 218, 1922.

2. *Chalybdicus reverens*, sp. n.

♂, Kupferglänzend, Anhänge der Elytren rotbraun, Fühler, Beine und Unterseite des Körpers grünschwarz, die dunklen Körperteile mit starkem



ABBILDUNG 2.—*Chalybdicus reverens*, sp. n., männlicher Fühler.



ABBILDUNG 3.—*Chalybdicus reverens*, gezähnte Basis der Elytren.



ABBILDUNG 4.—*Chalybdicus reverens*, weiblicher Fühler.

Glanz. Kopf auf Oberseite und seitlich tief und gross punktiert, Unterseite mit kleineren, zerstreuten Punkten, Kopffurche ober- und unterseits durchgehend; Rüssel mit Ausnahme der breiten Furche mit sehr grossen Punkten,

die auch auf der Unterseite gross bleiben, Mittelfurche auf der Unterseite breiter als auf dem Kopf, Mesorostrum flach, schmal gefurcht, kräftig punktiert, Prorostrum schmäler als das Mesorostrum, mit breiter Mittelfurche und flachen Seitenrändern, Punktierung einzeln, auf dem verbreiterten Spitzenteil dicht, tief punktiert, nach dem Vorderrande zu nimmt die Punktierung ab. Fühler Abb. 2. Prothorax lang, eiförmig-elliptisch, tief und grob punktiert, gegen den Vorderrand und seitlich nimmt die Punktierung ab, Prosternum zerstreut, zart punktiert,—Basis der Elytren gezähnt (Abb. 3.), Seiten in der Mitte etwas verengt, Hinterrand mit flügelartigen Anhängen, die gegen das Ende nach oben gebogen sind, 1.—3. Rippe mit grubigen Querfurchen. Metasternum gefurcht, zart punktiert, nur am Seitenrand grob und gross punktiert, 1. und 2. Abdominalsegment ungefurcht, 3.—5. Segment matt, alle Segmente einzeln punktiert, Apicalsegment behaart. Beine normal.

♀, Kopf kürzer, Prorostrum stielrund, Fühler Abb. 4. Elytren ohne Anhänge.

Länge (total) : 13—25 mm. Breite (Prothorax) : 1·5—2·2 mm.

Samoa : Upolu, Malololelei, 25.iv.1924, 23.iii.1925, 2000 F. (Buxton und Hopkins) ; Rain-forest, 2000 ft. (Bryan). Savaii : Safune, v.1924 (Bryan).

6 ♂♂, 2 ♀♀.

Typen im Britischen Museum.

Von der einzigen bekannten Art, *hahnei* Kleine durch ganz andere Farbe, schlanken Habitus, Ungleichheit des 2.—8. Fühlergliedes und anders geformte Elytrenanhänge verschieden. Variationsneigung war nur sehr gering.

ABBILDUNGEN.

Abbildung 1. *Cyphagogus samoanus*, sp. n., Farbenverteilung auf den Elytren.

- „ 2. *Chalybdicus reverens*, sp. n., männlicher Fühler.
- „ 3. „ „ „ gezähnte Basis der Elytren.
- „ 4. „ „ „ weiblicher Fühler.

A N T H R I B I D A E

BY KARL JORDAN, PH.D., ZOOLOGICAL MUSEUM, TRING

(With 11 Text-figures.)

VERY few Anthribidae are known from the Pacific islands east of New Guinea. Considering the abundance of species in New Zealand, New Guinea, and the Malay Archipelago, we must expect the family to be well represented also on the Solomons and the islands farther east. The present collection is a most welcome contribution to our knowledge of the distribution of this family. Though the collection includes representatives of only fourteen species, no fewer than nine of these are new, two of them representing new genera. With the exception of the first three in the list here published, all the species obtained are small. As such Anthribids generally escape the notice of the collector who does not specially search for minute insects, some of the new species may have as wide a distribution as *Araecerus vieillardi*, which is common in Samoa and New Caledonia and extends across New Guinea as far west as the Philippines. One species, *Scirtetinus pacificus*, has its nearest relatives in the far away Seychelles, but new discoveries in the Malay Archipelago probably will link up these widely separated countries. Two, *Cerambyrhynchus schoenherri*, and *Proscopus veitchi*, are restricted to the Fiji-Samoan groups of islands and are related to other South Pacific genera, while the affinities of all the other species are with Indo-Malayan and particularly Philippian forms.

1. *Cerambyrhynchus schoenherri* Montrouz., 1855.

The genus, which is nearest to *Acanthopygus* Montrouz. (1860), of New Caledonia, and *Rhinotropis* Fairm. (1881), of Fiji, contains only one species, originally described from material from Wallis Is., common in Fiji and Samoa. Montrouzier named the species after Schoenherr, but erroneously spelt the name of that famous Coleopterist with a double *n*; we have adopted the corrected spelling, as has been done by everybody. The description appeared in *Ann.*

Soc. Agric. Lyon, vii, 1855, but usually the separate issue of the *Faune de l'île de Woodlark*, 1857, is quoted.

The series obtained well illustrates the great variability in size usual in this species, the smallest specimen (a ♀) measuring in a straight line from the anterior margin of the pronotum to the apex of the pygidium 5.5 mm., and the largest (a ♂) 15 mm.

A series from Upolu: Apia, ii., iii., iv., v., vi.; also obtained by J. S. Armstrong, iii. 1924. Tutuila: Pago Pago, ix. 1923 (Steffany).

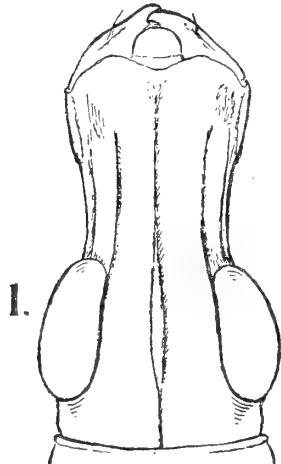
Notiana, gen. nov.

Near *Sintor* Schoenh., 1839. Proboscis with five dorsal carinae; its apical margin with broad shallow sinus. Labium not divided into two distinct lobes. Antennal groove foveiform. Antenna not reaching middle of prothorax.

Genotype: *N. buxtoni*, sp. n. Here also belongs *Sintor superciliaris* Jord., 1895, of the Philippines.

2. *Notiana buxtoni*, sp. n. (Text-fig. 1).

♂, Robust, dark brown, here and there rufescent, variegated with grey and yellowish pubescence, minutely coriaceous, with no distinct punctures apart from the rows on the elytra.



TEXT-FIG. 1.—*Notiana buxtoni*,
proboscis, head.

Proboscis a little longer than it is apically broad, median carina nearly reaching to apex, divided at base and continued as two carinae across frons, the groove between these two carinae reduced on occiput to a narrow channel; the lateral carinae abbreviated; middle of under side of proboscis cariniform; area between gular sinus and antennal groove bicarinate, the depression between these two ridges continuous with a groove situated at some distance from the base of the gular sinus. Frons broader than half the rostrum, both grey, occiput for the greater part brown. Distal segments of antenna paler brown than proximal ones, segment 3 nearly as long as 4th and 5th together, 4th to 8th gradually decreasing in length, 8th about twice as long as apically

broad, conical, club broad, 9th not quite symmetrical, triangular, nearly half as long again as broad, 10th broader than long, 11th as long and as broad as 9th, but ovate.

Pronotum marmorated with grey, conical, one-eighth broader than long, with two dorsal depressions from near apex to carina, united behind, sides likewise flattened, particularly in posterior half; carina concave in middle, convex halfway to side, behind it on each side a yellowish spot bounded dorsally by a blackish spot.

Elytra almost one-half longer than broad, parallel from base to middle and then rounded, dorsally depressed to fifth interspace, at base between sutural interspace and fifth a large blackish conical elevation, another, smaller, elevation at the beginning of apical declivity, more lateral than the basal hump, dorsally not much raised above the level of interspace five; depressed dorsal area grey, with a few brown spots, sides brown and rather profusely spotted with grey, area between posterior tubercles brown, bearing a few grey spots, apical declivity grey marbled with brown, basal two-thirds of suture slightly yellowish. Pygidium a little broader than long, gradually narrowing, sides straight, apex truncate, slightly sinuate in middle, the angles rounded off.

Middle of sterna sparingly grey, sides of pronotum marbled with grey, sides of meso- and metasterna densely pubescent, yellowish, a brown lateral smear at base of metepisternum and another near its apex. Abdomen densely pubescent, grey, with a row of brown spots in middle of side, and an additional lateral spot on segments 4 and 5. Legs blackish, with sparse grey pubescence, femora and upper side of tibiae with ill-defined blackish markings, tarsi unicolorous, foretarsus about one-fourth shorter than foretibia.

Length: (excl. of head) 7 mm.

Upolu: Apia, 29.iii.1924, one ♂.

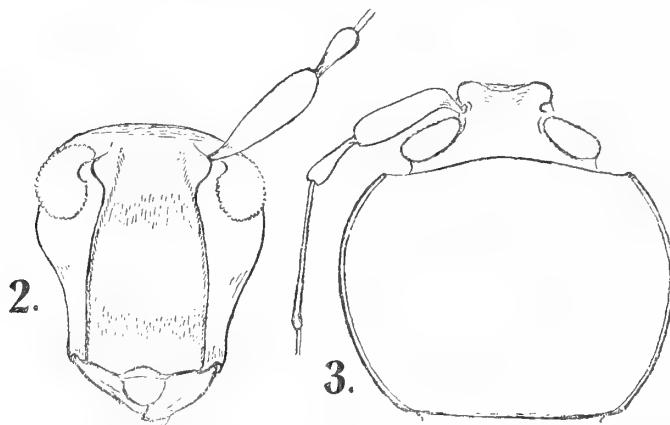
3. *Eucorynus stevensi* Pasc., 1859.

Widely distributed in the Papuan subregion. Not formerly known to me from anywhere east of New Guinea.

Upolu: Apia, 18, 24.iv.1924, two ♀♀; Tafua Volcano, 19.iv. (Swale), one pair.

4. *Proscopuss veitchi* Jord., 1924 (Text-figs. 2 and 3).Jordan, *Nov. Zool.*, xxxi, p. 256, 1924.

This species, of which the type was obtained in Fiji, does not seem to be rare in Samoa. Its face (Text-fig. 2) is vertical, almost flat, bounded on each side by a sharply marked carina, which ends dorsally at the tubercle of the antennal groove. From above the proboscis is not visible (Text-fig. 3).

TEXT-FIG. 2.—*Proscopuss veitchi*, head.TEXT-FIG. 3.—*Proscopuss veitchi*, head and pronotum.

Upolu: Aleipata, Lalomanu, xi.1924, one ♀; 23.ix.1916, one ♀. Tutuila: Leone Road, 19.ii.1924 (Bryan), one ♀; Amauli, 5, 6, 7.ix.1923 (Swezey and Wilder), 6 ♂♂, 2 ♀♀; 760-900 ft., iv., and 1070 ft., vi. (Kellers).

5. *Araecerus fasciculatus* Deg., 1775.

Originally an Oriental species, now distributed over nearly the whole of the tropics and frequently found in stores in Europe. Does much damage to beans of cocoa, coffee, etc. One of the largest species of this genus. Tibiae, or at least the foretibia, spotted with brown on upper side; club of antenna slender, with its three segments strongly asymmetrical.

Upolu: Apia, vi.1925, damaging stores of nutmeg.

6. *Araecerus vieillardi* Montrouz., 1860.

As in *A. fasciatus*, the tibiae spotted with brown; but the club of the antenna nearly symmetrical and the foretibia of the male armed with a strong apical mucro.

Length: 2.7-3.8 mm.

A series of both sexes from:

Upolu: Apia, ii., iii., iv., v., vi., x., xi., some on cotton; Vailima, 600 ft., vi., x., xii.; Malololelei, 2000 ft., iii. 1924. Savaii: Fagamalo, xi. 1925; Safune, lower forest, 1000-2000 ft., v. 1924 (Bryan); Lotopa, iii. 1917, eating cocoa pods (Swale). Tutuila: Leone Road, iii. 1926 (Judd); various altitudes from 760-1200 ft., iv., vi., viii., x., and also Pago Pago, iv. (Kellers).

Tonga Is.: Nukualofa, ii. 1925.

7. *Araecerus eudelus*, sp. n. (Text-fig. 4).

Near *A. nitidus* Jord., *Nov. Zool.*, xxxi, p. 250 (1924), of Fiji. Colouring variable: ground blackish or ochraceous-rufous, centre of pronotum brown, this area usually divided by a pale median line and each half posteriorly bifid; elytra usually grey marmorated with brown to a variable extent, sometimes blackish, spotted with luteous grey; legs ochraceous, middle of femora and apical half or third of hind-tibia, less often also the apex of the other tibiae and the mid- and hind-knees brownish.

Club of antenna broader than in *A. nitidus*. Pronotum more strongly reticulated, angle of carina more acute and the basal angle of pronotum more produced. Punctures of under side large, abdominal segments 1-3 or 1-4 with a basal and an apical row of large punctures, in middle of segments usually some additional punctures. Intercoxal process of mesosternum triangular, truncate-rotundate at apex.

In male, the pygidium broader than long, its apex almost evenly rounded; sides oblique, not parallel; anal sternite rounded in middle, convex; foretibia and -tarsus woolly on under side, tibiae without mucro.

In female, the pygidium one-third broader than long, rotundate-angustate, the apical projection abrupt.



4.

TEXT-FIG. 4.—*Araecerus eudelus*, lateral aspect of pronotum.

Length (head excl.) : 2.0-2.6 mm.

A series from :

Tutuila : Pago Pago, xii.1924 (type) ; also obtained in ix.1923 (Swezey and Wilder) ; 900-1200 ft., vi., and 760-900 ft., iv. (Kellers). Upolu : Apia, v.1924 (Bryan) ; ix.1923 (Swezey and Wilder) ; Tuaefa and Leulumoeaga, ix.1923 (Swezey and Wilder) ; Vailima, i.1925 ; Malololelei, 2000 ft., vi.1924. Manua Is. : Tau, ii.1926 (Judd).

8. *Araecerus sublevis*, sp. n.

Nearest to *A. greenwoodi* Jord., l.c., p. 246, of Fiji. Surface-structure less obsolete. Pronotum reticulate-coriaceous, but the reticulation less regular and very much less distinct than in *A. eudelus*, sp. n., angle of carina a little smaller than 90°, i.e. much less acute than in *A. eudelus*, on each side of disk of pronotum a large brown patch, which is variable and usually extends backwards and forwards laterally. Elytra elongate as in *A. eudelus*, with the following variable brown markings : a spot each on shoulder, on subbasal swelling and behind it, a streak on anterior half of suture, an interrupted or nearly complete band below middle and another in front of apical declivity, the markings sometimes more or less connected with one another. Legs almost uniformly pale rufous, without distinct spots, middle of femora and apices of tibiae usually darker. On segments 1-3 of abdomen a basal and an apical row of large punctures, the apical row obsolete in centre of segments, on 4 a basal row only.

In male the foretibia and foretarsus villose on under side, without teeth ; pygidium a little longer than broad, narrowing towards apex, which is rounded ; anal sternite truncate-emarginate, flattened in middle, more than twice as long in middle as the preceding segment.

In female the pygidium as long as broad, almost gradually narrowing into a small projection, sides slightly rounded.

Length : 2.3-3.1 mm.

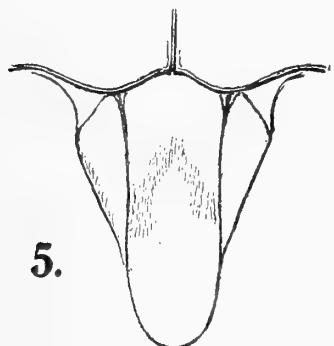
A small series from :

Tutuila : Pago Pago, ix.1923 (Swezey and Wilder), iv.1924 (Bryan) ; Afono Trail, ix.1923 (Swezey) ; 760-900 ft., iv. 1000 ft., viii. ; 1200 ft., vii. (Kellers). Upolu : Sliding Rock, Tuaefu, ix.1923 (Swezey and Wilder) ; Aleipata, iv., and Malololelei, 2000 ft., iv.1924, type, ♀.

Savage Is. : Niue, viii.1918 (Kellers), one ♀.

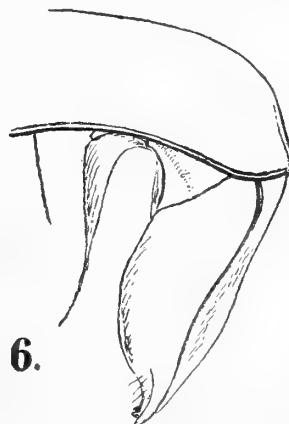
9. *Deropygus fornix*, sp. n. (Text-figs. 5 and 6).

Similar to *D. arcus* Jord., 1924, of the Philippines; colour and markings the same except that the three postmedian spots on the pronotum are isolated, and the two subapical spots on each elytrum confluent. Frons slightly narrower than the first segment of the antenna; eye strongly transverse (antennae, except basal segments 1-4, missing in the type). Elytra broadest at base, more than half as long again as broad, longer than in *D. arcus*. Pygidium of nearly



5.

TEXT-FIG. 5.—*Deropygus fornix*, pygidium.



6.

TEXT-FIG. 6.—*Deropygus fornix*, lateral aspect of posterior segments.

even width from base to apex, narrower at base than in *D. arcus*, three times as long as broad. Abdomen even more strongly arched than in *D. arcus*, the highest point of the arch slightly above the margin of the elytra. Anal sternite almost vertical, impressed at apex, with a brush of short broad bristles on each side.

Length: 3.2 mm.

Tutuila, 900-1200 ft., 30.vi.1918 (Kellers), one ♂.

Stenorhis, gen. nov.

Proboscis very short, transverse, in front of antenna not longer than segment 1 of latter is broad, apical margin convex in middle. Labiophore broad and short, mandible almost straight on outer side. Antennae close together, the groove a well-defined sulcus which extends downwards, ending on a level with the buccal sinus; segments 1 and 2 much thicker than 3-8, 1st twice as long as 2nd, 3rd to 7th about equal in size, 8th a little shorter, club

slender, 9th and 10th conical, nearly alike, 11th elongate-elliptical, slightly longer than 10th, shaft and club with a number of fairly long bristles. Scutellum longer than broad, oblong, apex rounded. Eye lateral, round, coarsely faceted as in *Deropygus* Sharp, 1891, not very prominent. Prothorax long, antecoxal portion twice as long as the coxa is wide; dorsal carina basal, lateral carina extending much beyond middle, but not quite reaching to apex, angle of carina slightly obtuse. Elytra cylindrical. Legs short, hind tibia with prominent notch, which bears a crest of bristles; tarsal segment 1 at most one-half longer than apically broad, tooth of claw long.

Genotype: *Stenorhis ampedus*, sp. n.

Near *Deropygus* Sharp, 1891, but distinguished inter alia by the very short rostrum and long prothorax.

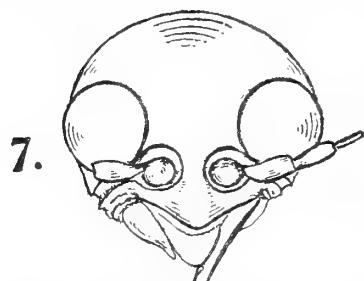
9A. *Stenorhis ampedus*, sp. n. (Text-fig. 7).

More than twice as long as broad; rufescent brown, with long brownish grey pubescence which lies flat on the derm, but does not quite conceal the

ground. Club of antenna as long as segments 3 to 7 together. Prothorax a little broader before middle than at base, coarsely reticulated, angle of carina nearly 90° , not rounded-off. Elytra punctate-striate, the punctures very large, the interspaces smooth and glossy, impunctate except for the minute points in which the pubescence is inserted. Pygidium coriaceous-reticulate, slightly convex, almost semicircular, apical margin incrassate. Prosternum almost uniformly punctate, the punctures large and well separated from each other. Metasternum with the punctures smaller. Abdomen minutely punctate, segment 1 with a basal row of large punctures. Third tarsal segment broad.

Length: 2.4 mm.

Ellice Group: Nukufetau, 20.xii.1924, one ♂; not known to occur in Samoa.



TEXT-FIG. 7.—*Stenorhis ampedus*, head.

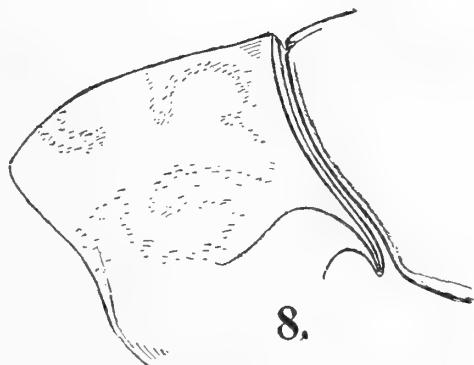
10. *Melanopsacus hopkinsi*, sp. n. (Text-fig. 8).

One of the larger species of this genus, with the basal angle of the prothorax very strongly produced.

Pitchy black, base of antenna and tarsal claws dark rufous; markings grey, silky, well defined. Proboscis and head reticulate, grey, occiput black. Pronotum rugate-reticulate, with the following grey markings on each side (indicated in Text-fig. 8): a broadish stripe along carina curving forward at both ends halfway to apex; between the two branches a short projection; a broad apical border not quite reaching to upper portion of eye, somewhat dilated at upper end, laterally connected with the basal border; in the black dorsal apical area a spot near middle line; lateral carina S-shaped, with the upper portion of the S quite short and the lower long.

Scutellum triangular, apex pointed and depressed. Elytra punctate-striate, interspaces granulose, short basal row of punctures not joining the sutural row; the following grey markings on each elytrum; four linear spots at base, more or less connected with one another at basal margin; a line in sutural interspace from near base to two-thirds; two linear spots behind subbasal swelling, two others farther lateral; a transverse band of seven spots, two of them median, the next three postmedian and the remaining two sublateral and median; before apical declivity four linear spots in interstices 2, 4, 6, 8; a marginal spot below shoulder, followed by a marginal line which reaches beyond middle and reappears at apex, where it joins a line in interspace 2. Pygidium rugate-reticulate, broader than long, strongly narrowing towards apex, which is evenly rounded.

Prosternum strongly punctate, a narrow line from coxa upwards impunctate, as is also a large basal lateral area from the carina downwards. Abdomen minutely and densely punctate, at the bases of the segments a row of large punctures, in middle these punctures more numerous and spread over segments 1 to 3, being particularly numerous on 1 and 2.



TEXT-FIG. 8.—*Melanopsacus hopkinsi*, lateral aspect of pronotum, left side.

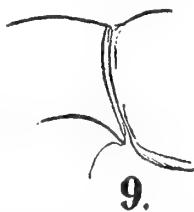
Length : 3.3 mm., breadth 1.7 mm.

Upolu : Apia, xii.1924, one ♀.

11. *Melanopsacus dulcis*, sp. n. (Text-figs. 9 and 10).

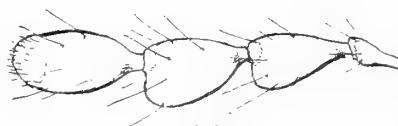
Smaller than *M. hopkinsi*, paler pitchy, legs more or less rufescent, markings golden as in *M. ceylonicus* Jord., 1895, more extended and less definite than in *M. hopkinsi*.

Segment 2 of antenna as long as 3rd, 4th, and 5th together, the segments of the club almost equal in length (Text-fig. 10), all longer than broad, 11th elliptical,



9.

TEXT-FIG. 9.—*Melanopsacus dulcis*,
basal angle of pronotum, left side.



10.

TEXT-FIG. 10.—*Melanopsacus dulcis*,
club of antenna.

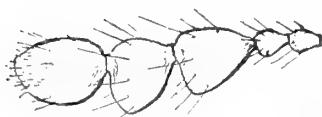
more than twice as long as broad. Reticulation of pronotum more prominent than in *M. hopkinsi*, basal angle much shorter. Basal line of punctures of elytrum posteriorly joining the sutural line.

Length : 2.0 mm. ; breadth 1.0 mm.

Upolu : Vailima, i.1925, one ♀, type ; Malololelei, 2000 ft., vi.1924, one ♀.

12. *Melanopsacus janus*, sp. n. (Text-fig. 11).

Differs from *M. dulcis* particularly in its antennae. Pitchy black, legs and base of antenna dark rufous, markings almost as in *M. dulcis*, but more silky grey, less golden. Reticulation of pronotum more prominent, basal angle shorter. Rows of punctures of elytra somewhat deeper. Metasternum and abdomen also more deeply punctate.



11.

TEXT-FIG. 11.—*Melanopsacus*
janus, club of antenna.

Segment 2 of antenna somewhat swollen, shorter than 3rd, 4th, and 5th together, club short, 9th and 11th a little longer than broad, 10th broader than long, both 9th and 10th rather strongly asymmetrical. Apex of fore tibia of ♂ widened

on inner side, middle and hind tibiae with sharp spiniform apical mucro. Pygidium of ♂ broad, slightly narrowing apicad, apical margin subtruncate, appearing incrassate when viewed from the anal side.

Length : 1·6 mm.

Three immature ♀♀ evidently belong to the same species. They differ from the ♂ in the angle of the pronotum being more produced.

Upolu : Malololelei, vii.1924, one ♂, type ; vi.1924, 2000 ft., two ♀♀ ; Vailima, i.1925, one ♀.

13. *Melanopsacus glenis*, sp. n.

Pitchy black, glossy, especially on the elytra, the pubescence consisting of dispersed hairs which are not concentrated into spots.

A little less than twice as long as broad (7 : 4). Sides of prothorax and elytra somewhat rounded, the insect appearing slightly constricted at the base of the prothorax. Antenna nearly as in Text-fig. 11. Pronotum densely reticulate, but the meshes smaller than in the previous species, and the inter-spaces a little wider ; basal angle very little produced downwards. The serial punctures of the elytra deep, the interstices without granules. Pygidium almost twice as broad as long, nearly evenly rounded and smooth, margins not distinctly elevated. Impunctate space of prosternum below carina small. On abdominal segment 1 a basal row of punctures, on 2nd and 3rd a subbasal and a subapical row.

Length : 1·6 mm.

Upolu : Malololelei, vii.1924, one ♀.

14. *Scirtetinus pacificus*, sp. n.

The only specimen obtained of this genus differs a little, particularly in the antenna, from the various species of *Scirtetinus*, Jord., 1914, discovered by Dr. Hugh Scott in the Seychelles, and may ultimately need to be transferred to a new genus. But I prefer to emphasise the relationship rather than the difference.

Glossy, as in *Scirtetinus*, carina of pronotum a very short distance from the base, its angle slightly obtuse, lateral carina extending to near middle.

Twice as long as broad ; piceous, tibiae, tarsi and base of antenna rufous ; pubescence very sparse. Segment 2 of antenna half the length of 1, elongate-conical, a little longer than 3rd and 4th together and very much thicker, 3rd to

8th imperceptibly decreasing in length, becoming gradually a little broader, with the sides more convex; club broad, as long as 4th to 8th together; 9th triangular, very slightly longer than broad, 10th broader than long, longer on posterior side than on anterior, 11th a little longer than broad, strongly rounded at apex and sides, slightly broader than 9th and 10th, hairs of club and preceding segments stiff and rather long, about as long as the segments.

Pronotum practically as long as broad, slightly rounded at the sides, minutely coriaceous, uniformly covered with dispersed large punctures, not reticulate. Elytra smooth, without stripes, apart from the sutural one, the stripes indicated by somewhat irregular rows of minute punctures, which are larger in anterior half of side. Pygidium nearly one-half broader than long, evenly rounded.

Length: 1.3 mm.; breadth 0.7 mm.

Upolu: Malololelei, 22.xi.1924, one ♀.

LIST OF TEXT-FIGURES.

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 ,, 4. *Araecerus eudelus*, lateral aspect of pronotum.
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 ,, 6. " " " lateral aspect of posterior segments.
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 ,, 8. *Melanopsacus hopkinsi*, lateral aspect of pronotum.
 ,, 9. " *dulcis*, basal angle of pronotum.
 ,, 10. " " club of antenna.
 ,, 11. " *janus*, club of antenna.

PROTERHINIDAE

By R. C. L. PERKINS, D.Sc., F.R.S.

So far as at present known, the species of this family are almost confined to the Hawaiian group. In that group there has been a very rich development of species, more than a hundred having been found, even supposing that a considerable number of those described by myself prove to be only varieties of others.

1. *Proterhinus samoae*, Perkins.

Proc. Hawaiian Ent. Soc., Vol. i, p. 87, 1907.

In 1902 a species was obtained in Honolulu from some coconuts, imported from Samoa for planting, and was subsequently described as *P. samoae* Perkins. Since the coconuts were taken straight from the steamer to a closed room in order that they might be examined and treated with insecticides, there was no question as to whether the insect had really come from Samoa. At first it seemed possible, however, that this isolated species might itself have been imported by man from Hawaii to Samoa, but this appeared unlikely when the insect was examined, since, though it possesses no very striking characters, it is not closely allied to any known Hawaiian form. So far as I am aware, no *Proterhinus* has been found on coconuts in the Hawaiian islands, though even had one formerly existed, it would probably have been exterminated by introduced predators before Blackburn began his collecting there some fifty years ago.

In November 1924, Messrs. Buxton and Hopkins collected *P. samoae* at Apia, but only one entire and one fragmentary example have been sent to me. The former is a ♂, and agrees perfectly with the type specimen, with which I have compared it. The damaged (headless) specimen is larger, and is probably a female. Since the rostral characters are frequently of great importance in

determining the affinities of these very difficult species, the acquisition of a perfect specimen of this sex is very desirable.

In March 1924, Mr. E. H. Bryan, Jun., visited Enderbury Is. in the Phoenix Group, which lies almost directly between Hawaii and Samoa, though distant from the latter by considerably less than one-third of the distance between these groups. Here he discovered a very remarkable new form of PROTERHINIDAE, which, in spite of the diversity exhibited by the Hawaiian series, can hardly be referred to the genus *Proterhinus* itself.

INSECTS OF SAMOA AND OTHER SAMOAN TERRESTRIAL ARTHROPODA

PROPOSED ARRANGEMENT :—

- Part I. Orthoptera and Dermaptera.
- „ II. Hemiptera.
- „ III. Lepidoptera.
- „ IV. Coleoptera.
- „ V. Hymenoptera.
- „ VI. Diptera.
- „ VII. Other Orders of Insects.
- „ VIII. Terrestrial Arthropoda other than Insects.

The work will be published at intervals in the form of numbered fascicles. Although individual fascicles may contain contributions by more than one author, each fascicle will be so arranged as to form an integral portion of one or other of the Parts specified above.



